

*National Institute on Drug Abuse*

# Drug Abuse Services Research Series

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## *Extent and Adequacy of Insurance Coverage for Substance Abuse Services*

*Institute of Medicine Report:  
Treating Drug Problems*

**Volume II**



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Alcohol, Drug Abuse, and Mental Health Administration

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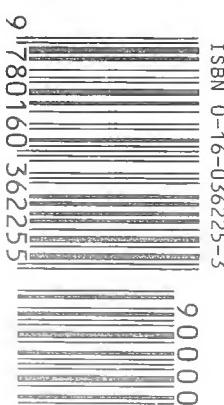
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*(Institute of Medicine Report: Treating Drug Problems)*

Volume 2

Commissioned Papers on Historical, Institutional,  
and Economic Contexts of Drug Treatment

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## **NIDA DRUG ABUSE SERVICES RESEARCH SERIES**

The *Drug Abuse Services Research Series* is issued by the National Institute on Drug Abuse's Financing and Services Research Branch within the Division of Applied Research. The National Institute on Drug Abuse (NIDA) is the Federal agency with primary responsibility for research on drug abuse. Such research includes the biological, pharmacological, psychological, and sociocultural aspects of drug abuse.

NIDA's Financing and Services Research Branch is responsible for coordinating and conducting research, demonstration, and evaluation studies on the capacity, efficiency, effectiveness, organization, structure, and financing of drug abuse treatment programs and delivery systems. The *Drug Abuse Services Research Series* disseminates the latest drug abuse services research on a range of topics, including quality of care, financing, and cost-effectiveness.

NIDA wishes to express its appreciation to the many members of the scientific and treatment community who reviewed the papers and reports in this issue as well as to the authors of these reports.

*The views and opinions expressed in this issue are solely those of the authors and do not necessarily constitute an endorsement, real or implied, by the National Institute on Drug Abuse or any other part of the U.S. Department of Health and Human Services.*

### **ACKNOWLEDGMENT**

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## FOREWORD

The Substance Abuse Coverage Study was prepared in response to Congressional direction contained in Section 6005, PL 99-570, the Anti Drug Abuse Act of 1986. This Section of the law provided for the National Institute on Drug Abuse (NIDA) to fund the Institute of Medicine (IOM) to study the extent and adequacy of coverage by public programs, private insurance and other sources of payment for the treatment and rehabilitation of persons with drug abuse problems. The report for the Substance Abuse Coverage Study resulted in two volumes. Volume 1 of the IOM report, "Treating Drug Problems: A study of the evolution, effectiveness, and financing of public and private drug treatment systems," is comprehensive and thought provoking. It looks at a broad range of drug treatment and service delivery issues and provides an important compilation and analysis of what is known and not known of the nation's drug abuse services delivery systems. Volume 2 contains commissioned papers which provide background reviews on drug controls, the drug treatment system, criminal-justice-system-based drug treatment, employee assistance drug programs, an economic model of drug treatment, and the cycles of cocaine use.

A Committee of outstanding drug abuse and health services researchers, practitioners and program planners was appointed by the IOM Division of Health Care Services to conduct this study. Their efforts included site visits to several treatment programs throughout the United States, analysis of available epidemiologic and services systems data on drug abuse, literature reviews, commissioned background papers, and interviews with experts in drug abuse treatment and services research, financing and delivery fields.

Recommendations made by the Committee address both research and policy issues based upon their assessment of the current state of knowledge. They address issues involving data acquisition systems and the generation of reliable performance and outcome data; the role of standards for admission, care and program performance; the provision of services to special populations such as adolescents, pregnant women and mothers of young children; and the establishment of priorities for expanding public treatment programs and services. A number of these recommendations directly relate to public and private financing and reimbursement for drug treatment and related services research. Among these are the future role for publicly financed (Medicaid) drug abuse services, and reimbursement for free-standing drug treatment facilities.

The recommendations in the Substance Abuse Coverage Study reflect the deliberations of the IOM committee. While NIDA does not necessarily agree or disagree with the conclusions and recommendations offered in this report, they will be useful and will be carefully considered as NIDA undertakes our research planning and management activities. The report will also contribute to the broader public dialogue regarding a number of drug abuse services issues. The solution to the complicated, difficult and costly problem of drug abuse and its vast consequences requires the concerted energies of us all. The wide distribution of both volumes of this report is an effort to further discussion among the scientific, policy making, service delivery, and the public and private sectors involved in efforts to address these problems.

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## PREFACE

The committee members and staff appointed in 1988 to conduct the Institute of Medicine's Substance Abuse Coverage Study were given a three-part task:

- investigate the extent of private and public funding of treatment for drug abuse and dependence;
- evaluate the adequacy of funding to meet the need for rehabilitation of these disorders; and
- make recommendations on how to meet the needs identified by the study.

The first volume of *Treating Drug Problems* is the committee's report on the evolution, effectiveness, and financing of public and private drug treatment systems. The chapters in Volume 1 discuss the history of ideas governing drug policy, the nature and extent of the need for treatment, the goals and effectiveness of treatment, the need for research on treatment methods and services, the costs and organization of the two-tiered national treatment system, the scope and organizing principles of public and private coverage, and recommendations tailored to each kind of coverage.

A key part of the collection and development of the information needed for this report was the commissioning of seven papers to inform the committee about selected aspects of the problem for which concise, accessible sources were lacking. All seven of these papers are included in this volume. Four of them untangle the complicated interactions that exist between drug treatment and other components of drug policy at the several levels of government organization.

The first paper, by David Courtwright, a member of the committee and a notable contributor to the historical literature on drug controls and social patterns, synthesizes the historical record and context of policy changes in the United States over the last century. Karst Besteman, who held major administrative responsibilities for implementing the drug treatment policies of the federal government during the 1970s, provides a closer examination of the content and rationale of successive shifts in the focus, scale, and mechanisms of federal support for treatment from 1960 to the present.

Gregory Falkin, Harry Wexler, and Douglas Lipton analyze the results of drug treatment programs in state prisons. Their review aims to isolate specific factors that seem to be necessary if more prison programs are to avoid the widespread conclusion that "nothing works" in criminal rehabilitation. Looking at a different level of the criminal justice system, Mary Dana Phillips studies the ways in which county judicial agencies and penal institutions deploy treatment ideas and personnel in the management of drug cases.

The other three papers consider drug treatment outside of its direct relations to government. Paul Roman and Terry Blum examine employer policies toward illicit drugs, particularly as these policies have evolved since about 1970, giving a unique overview of the era of employee assistance and drug screening programs. Richard Steinberg considers drug treatment as an economic service from the point of view of potential buyers, sellers, and regulators. The final paper, by Ronald Siegel, returns to the historical plane on which Courtwright's paper begins the volume. Siegel considers the changing technology of cocaine as a cultural and market commodity and the associated implications for the nature of the cocaine problem.

The authors of these commissioned papers made major contributions to the committee's thinking, and they responded graciously to its many requests for more, less, different, or clarifying information. The committee does not necessarily concur with every conclusion drawn by these authors. Nevertheless, it learned a great deal from them and is pleased to publish their papers in conjunction with its report. The committee gained insight and information from hundreds of other individuals in addition to those who authored commissioned papers. A number of these contributors held formal roles in relation to the study, as noted in the preface to the first volume of the report. Many other contributions are made apparent in the report's citation of published references. Still, there are large numbers of people who assisted the committee not through formal or published channels but by sharing their experience in direct discussions or other communications with committee members and staff. It seems fitting to conclude this volume with a section that acknowledges these sources.

Finally, a large thanks is owed to IOM editor Leah Mazade, administrative secretary Linda Kearney, and research associate Elaine McGarraugh. They have dedicated many hours to preparing this volume for publication, and without that dedication it would not have been published. I would be remiss not to express as well the committee's gratitude to the staff of the National Academy Press, especially Sally Stanfield, managing editor, for diligently shepherding this volume and its predecessor through the final stages that bring the finished book into the reader's hand.

Dean R. Gerstein  
*Study Director*

## **A CENTURY OF AMERICAN NARCOTIC POLICY**

*David T. Courtwright*

American narcotic policy has been highly variable, having passed through at least four major stages during the past 100 years. In the nineteenth and early twentieth centuries, government involvement was minimal. Drug use was largely a private matter, as was drug treatment. Addiction was understood as either a personal or a medical problem, and various treatments were provided on a fee-for-service basis. In 1909-1923, however, the federal government became progressively more involved in the field as a series of important laws, court cases, and administrative decisions effectively criminalized nonmedical narcotic use and proscribed certain treatments, notably long-term maintenance and ambulatory detoxification. The following four decades, from 1923 to 1965, might be described as the classic era of narcotic control--"classic" in the sense of simple, consistent, and rigid. Few avenues of treatment were open to addicts, and American narcotic policy was unprecedently strict and punitive, both in comparison with other Western countries and with what it has become in our own time. During the 1960s the police approach was challenged and gradually superseded by a hybrid approach, combining traditional law enforcement with new treatment strategies, including methadone maintenance and therapeutic communities. Since 1965 drug abuse has been regarded as a medico-criminal problem, the likely pattern of the future, although there are signs that the pendulum is beginning to swing back in the direction of strict law enforcement.

The following narrative history of these events is based on written primary and secondary sources, as well as oral history interviews with former addicts, physicians, and police personnel.<sup>1</sup> A good deal of attention is paid to the changing epidemiology and sociology of narcotic abuse

because the changes in government policy (and hence in the array of medical treatments available) are unintelligible without knowledge of the changing demographic and social backgrounds of the users themselves. Although this narrative focuses primarily on opiate and cocaine addiction and treatment, there is also a brief discussion of other drugs, especially alcohol. Often told separately, the histories of drug and alcohol use in America are in fact intertwined, perhaps never more so than in the last decade.

### **THE SOCIAL AND LEGISLATIVE ORIGINS OF NARCOTIC CONTROL**

During the nineteenth century there was virtually no effective regulation of narcotics in the United States. Various preparations and derivatives of opium were freely available and widely used. Several states had statutes governing the sale of narcotics, and many municipalities forbade opium smoking, but these laws were only sporadically enforced. In practice just about anyone could secure pure drugs with little bother and at modest cost. Pharmacists even delivered drugs, dispatching messenger boys with vials of morphine to houses of high and low repute. Some customers were actually unaware of what they were purchasing: proprietors of patent medicines were notorious for slipping narcotics into their products, which before 1906 bore no list of ingredients on their labels. Doctors, too, frequently overprescribed narcotics. Opiates were among the few effective drugs they possessed, and it was tempting to alleviate the symptoms (and thus continue the patronage) of their patients, especially those who were chronically ill.

The result of all this was a narcotic problem of considerable dimensions, with perhaps as many as 300,000 opiate addicts at the turn of the century, plus an unknown number of irregular users.<sup>2</sup> Today there are perhaps as many as 500,000

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narcotic (mainly heroin) addicts in the United States, but the country's population is also much larger. On a per capita basis, narcotic abuse was certainly as bad and probably worse in the late nineteenth century.

Victorian Americans were much less worried about drugs, however, than they were about drink. An influential reform coalition, consisting mainly of native-born, white, middle-class Protestants, attacked alcohol as the principal source of social problems. Drinking was wrong because it led to drunkenness, and drunkenness led to battered wives, abandoned children, sexual incontinence, venal voting, pauperism, insanity, early death, and eternal damnation. Drinking was also objectionable because it was associated with groups whose morality was highly suspect: Catholic immigrants, machine politicians, urban blacks, demimondaines, criminals, tramps, casual laborers, and others of the lower strata. Reformers sought to uplift and reform drunkards, but they were also frank in their desire to control their behavior and to minimize the social costs they generated. The more ardent among them fought for and achieved prohibition, first on a local and state level, and then, in January 1920, on a national basis.

Given the prevalence of narcotic use, why were Americans initially so much more agitated over the drink question? One answer lies in the comparative effects of opiates and alcohol. It was a commonplace that drink maddened whereas opium soothed. Alcoholics were notoriously obstreperous and often injured others as well as themselves. Their behavior was a public nuisance and a scandal. Addicts, by contrast, tended to be quiet and withdrawn. Although they might merit reprobation for their enslavement to a drug, theirs was a private vice, unlikely to affect anyone outside their immediate family--and in some cases even the family did not know. These distinctions were grounded in pharmacological reality, insofar as narcotics are potent tranquilizers, capable of producing a peaceful and languid state. It is easier for an addict to remain inconspicuous than a drunkard.

Who the narcotic users were was as important as how they acted. There was what might be termed a "hard core" of opium smokers, mainly Chinese laborers and white criminals; they were contemptuously regarded and likely to run afoul of the law. Opium smokers, however, made up only a minority of regular users. Addicts were more often found among upper- and middle-class women, many of whom had begun using morphine to relieve the symptoms of various illnesses. Surveys taken in the late nineteenth century consistently showed that two-thirds of those addicted to medicinal opiates, such as laudanum or morphine sulfate, were female. Given that so many addicts were respectable women of ailing body and docile comportment, it is understandable that they occasioned less alarm than heavy drinkers.

Narcotic addiction was not entirely ignored by the medical profession. As the number of addicts grew in the 1870s and 1880s, some physicians began to specialize in treating addiction and to develop theories about it. They debated its etiology; whether it, along with alcoholism, was symptomatic of a more general neurological disorder; whether gradual or rapid withdrawal was to be preferred; whether withdrawal could or should be palliated with nonnarcotic drugs and, if so, which ones. A hundred years later, most of these issues are still not completely resolved.

Nineteenth-century physicians interested in addiction were handicapped by the embryonic state of medical science--they knew nothing of drug receptors or endorphins or narcotic antagonists--but they did have at least one advantage over modern researchers: almost total freedom. There were no federal regulations and no bureaucracy to deal with; moreover, medical institutions, such as they were, largely steered clear of the problem. Doctors were thus at liberty to experiment, to prescribe purges, baths, electric therapy, dietary regimens, and various exotic concoctions for their addicted patients. Many of the leading authorities in the field operated private asylums where treatment was tailored to their particular theories of addiction.

Addicts, too, had a fair amount of choice. They could stay at one of the private asylums or attempt withdrawal as an outpatient under the supervision of a physician. Some bought "opium habit cures," patent medicines that were often laced with narcotics and hence no cure at all. Or they could do nothing and simply continue to use undisguised narcotics. Few addicts were legally committed to institutional treatment. When they made an effort to quit, it was generally motivated by a sense of disgust, combined with health and financial worries and pressure from family and friends. Addicts, in short, were far less likely than alcoholics to be involuntarily confined.

A handful of late-nineteenth-century medical specialists saw addicts in a less benign light. They argued that addiction and alcoholism were in fact related, that both were a manifestation of an underlying nervous disorder called inebriety, and that "inebriates" needed institutional care, against their wills if necessary. They failed, however, to carry this last point. The public thought of addiction as neither a crime nor a fit object for mandatory treatment. Whatever resentment existed against addicts was diffuse and lacked institutional expression.

Within 25 years these attitudes had dramatically changed. Even as the country was having second thoughts about alcohol prohibition, there was virtual consensus on the need to suppress narcotic addiction. (Some extremists in the 1920s and 1930s even proposed firing squads as a permanent solution for the drug problem, on the theory that the only abstinent addict was a dead one.) This pronounced attitudinal shift was related to changing perceptions of who drug addicts were, how they acquired their habits, and how they behaved under the influence of drugs. After the turn of the century there were fewer new cases of medical addiction as physicians became more conservative in their use of narcotics and the public became more chary of self-medication, thanks to the Pure Food and Drug Act (1906) and the efforts of muckrakers like Samuel Hopkins Adams. Some existing medical addicts detoxified and remained abstinent, but the majority probably

continued using morphine. Because many of them were old and ailing, however, they soon disappeared from the scene, leaving a residue of generally younger, less sympathetic users who had begun experimenting with drugs in such decidedly nonmedical establishments as brothels and saloons.

Opium smoking remained popular in the white underworld and continued to attract recruits, even though the number of Chinese living in America had begun to decline. Two powerful new drugs, cocaine and heroin, quickly spread outside medical practice and became popular euphorogenic agents. Cocaine, although not pharmacologically a narcotic, was often described as such and became associated in the public mind with crime sprees, particularly by black men. In the 1910s and early 1920s heroin use became widespread in the immigrant slums, where young men took to snorting small packets of the white powder. For some it was a passing fancy, but for others it became a lifelong preoccupation. In 1924 New York City Corrections Commissioner Frederick A. Wallis described what he took to be a typical case:

*The young man, 16 to 20, leaves school because he won't study, he doesn't like discipline, and shows inclination toward truancy and dishonesty.*

*Out of school, his bad habits increase. He visits pool-rooms and dance halls, and chop suey restaurants and becomes one of the neighborhood rowdies or corner loafers. He goes with a gang and becomes reckless and is soon participating with the gang in neighborhood thefts. If he has a job, it becomes burdensome, and offensive to him. He then neglects his work, loses his job, and all his ambitions are in sympathy with criminal tendencies.*

*He is arrested first for a minor offense, spends five to ten days in prison, loses self-respect, is released and returns to society with less regard for law and constitutional authority. . . .*

*Having served a term in prison, he is now qualified by the gang for exploits in the underworld. . . . He soon learns . . . the easiest and most profitable way to get money with less personal hazard to himself and a lighter prison sentence, [and he] becomes a drug peddler and distributor. Before he realizes the danger he has been taught to use the drug. Soon he must have the drug at any price.*

*He resorts to shoplifting and indulges in other petty offenses to obtain the drug. The next step is prison again, and he returns to society again, and then is arrested for a more serious crime. The craving for drugs is growing all the time. He must have more drugs. The requirement of \$2.00 a day has grown into*

\$5.00 or \$10.00 a day. In his intensified craving he becomes a bandit, a hold-up man, murder follows. A wreck, mentally, physically and morally, he is given a life sentence or the electric chair.<sup>3</sup>

What is particularly interesting about this account is its harsh, judgmental tone. It was not just that the old-fashioned medical addicts were disappearing and being replaced by a new breed, it was how people felt about it. As had been the case with alcohol, disdain for users, tinged by ethnic and class prejudice, was an impetus for restrictive legislation. Change a very few words in Wallis's description and one finds the old stereotype of the drunkard as a menacing, irresponsible wretch.

Addiction thus went from being a pathetic condition to a stigmatized one. Like venereal disease, it came to be understood as something that was acquired through forbidden indulgence with evil associates. Also like venereal disease, it could afflict, or destroy, the lives of innocent others--the spouse, the family, the fetus, or the newborn child. Both diseases were, in a broad sense, communicable: addicts (and venereal patients) were alarming, not only because they had gotten themselves in trouble but because they might put others in the same situation. After inadvertent medical addiction ceased to be much of a factor, it was clear that the majority of new users were introduced to drugs by and often became part of a network of experienced users and dealers. A deviant subculture was in place and perpetuated itself through continuous recruiting.

Deviant groups in American history have sometimes been dealt with by informal, local means--harassment, exile, even lynching. But when such groups become large enough, or threatening enough, they often evoke a legislative response. The resultant laws serve a dual purpose. They are symbolic in that they define and reiterate majority norms; they are also instrumental to the extent that they employ the police power of the state to restrict or eliminate the objectionable behavior. There have been many instances of this, from the 1675 Massachusetts law attacking the "damnable haeresies" of the Quakers to the 1940

Smith Act, which was used to prosecute domestic communists and Nazi sympathizers. Narcotic control seems to fit neatly into this pattern. As the legal scholars Richard Bonnie and Charles Whitebread put it, "Once opiate use became identified with otherwise immoral or unlike populations, prohibition was almost automatic."<sup>4</sup>

The word "almost" must be stressed, however. The negative social and behavioral connotations surrounding nonmedical narcotic use were not, in any meaningful historical sense, a sufficient cause of the ensuing prohibition and criminalization. There was still room for the play of expert judgment and legislative discretion, and it is well known that contemporaries in other developed countries, such as Britain, arrived at less Draconian solutions. It is fair to say, however, that the sinister transmogrification of narcotic addiction was a critical precondition for the legal developments that followed. It would have made no sense--politically, culturally, morally, or in any other way--to repress addicts if they had still consisted disproportionately of sick old women. Even after the laws were changed, physicians and law enforcement officers often tacitly permitted the dwindling number of iatrogenic addicts to continue their "medication." Being ill, these patients were sympathetic figures and, because they were isolated from the street drug subculture, posed no threat to anyone.

The transformation of American narcotic laws, like the transformation of the addict population itself, evolved over a period of time. The catalytic event was America's growing involvement in Asia, a region long notorious for its opium trade. American military governors in the recently acquired Philippines, missionaries in China, and diplomats studied the problem and sought to coordinate international efforts to eliminate or reduce the traffic. As a result of their efforts an international opium commission met at Shanghai in February 1909. The American delegation, anxious to assume a leadership role but fearful that the laissez-faire narcotic market at home left them open to charges of hypocrisy, pressed for at least token congressional legislation. This they received

taken congressional legislation. This they received in the form of a hastily enacted law forbidding the importation of opium "for other than medicinal purposes," that is, opium for smoking. Banning this form of the drug cost the federal government more than \$800,000 in annual revenues, but it was politically feasible because opium smoking had such low-life connotations and few American firms had a large stake in its continued importation.

Reformers were not satisfied with this one measure, however. They continued to work for a more comprehensive narcotic law, both to address

the domestic problem and to bring the country into line with the provisions of an international treaty then being negotiated. Their most forceful advocate was Dr. Hamilton Wright, American delegate to the Shanghai Commission and later the Hague Opium Conference (1911-1912). Wright compiled an official report for Congress, complete with authoritative references to drug-inspired rape and miscegenation, as well as statistics that seemed to show that narcotic use was outstripping population growth. (In fact it was not; per capita consumption was down after 1900, largely owing to increased therapeutic conservatism.)

**TABLE 1 Opiate Addiction Estimates for Various Groups in the United States Made by Hamilton Wright in 1910**

Group	Percentage Addicted
General criminal population	45.48
Chinese	25.0 <sup>a</sup>
Prostitutes and their companions	21.6
Prisoners in large jails and state prisons <sup>b</sup>	6.0
Medical profession	2.06
Trained nurses	1.32
Other professional classes	0.684
General adult population <sup>c</sup>	0.18
College and university students	"practically unknown"

<sup>a</sup>Percentage estimate includes those who smoked a pound-and-a-half or more per annum but excludes "social smokers."

<sup>b</sup>As distinct from the "general criminal population," which committed lesser crimes and hence ended up in local jails rather than large or state institutions.

<sup>c</sup>Exclusive of the groups enumerated above.

SOURCE: U.S. Senate, Report on the International Opium Commission and on the Opium Problems as Seen Within the United States and Its Possession (Washington, D.C.: U.S. Government Printing Office, 1910), pp. 42, 47.

Wright also played up the prevalence of lower-class and criminal use, as may be seen from his specific addiction estimates in Table 1. The percentages reproduced here are as unfounded as they are pretentious: Wright's research was highly unsystematic and hardly merited numerical expression, let alone two- and three-decimal-point precision.<sup>5</sup> He was, however, magnifying an epidemiological reality: by 1910 criminals and prostitutes did have much higher rates of use than the general adult population and possibly (although this is not certain) higher rates than medical personnel, who historically had a serious addiction problem. Wright was, moreover, believed. His statements and statistics were given wide circulation in the popular press, medical journals, congressional committee reports, and other official documents.

Despite his skills as a propagandist, Wright got a bill neither as soon as nor as stringent as he wanted. He ran into opposition, especially from drug companies that did a large wholesale business in narcotics. He also encountered philosophical and constitutional difficulties, as the limits or even the existence of a federal police power were not then generally agreed upon. (Indeed, in 1918 and again in 1922 the Supreme Court would strike down something as seemingly proper and desirable as federal child labor laws.) The regulation of medical practice was a matter traditionally left to the states, and narcotics were still very much a part of medical practice.

The measure that finally passed, the Harrison Narcotic Act of 1914, was a complex compromise. It required anyone who sold or distributed narcotics--importers, manufacturers, wholesale and retail druggists, and physicians--to register with the government and to pay a small tax.<sup>6</sup> When they sold or otherwise distributed narcotics, they had to make a detailed record of the transaction, open to government inspection. Unregistered persons caught with narcotics in their possession were presumptively guilty of violating the law, unless the drugs had been "prescribed in good faith by a physician, dentist, or veterinary surgeon registered under this Act." If convicted, they

could be fined and imprisoned for up to five years. It was anticipated that such sanctions would make the narcotic traffic transparent and confine it to legitimate medical channels.

Two features of the Harrison Act are of particular interest. One is the definition of narcotics as opium- and coca-based drugs. As previously noted, opium and coca are medicinally distinct. One is a central nervous system depressant, the other a stimulant. They were combined legislatively, however, because of the assumption that both were euphorogenic, potentially habit-forming, and associated with crime. It was for similar reasons that marijuana would also later be described as a narcotic.<sup>7</sup>

The second point is the law's failure to address the question of whether an addict could receive, on an indefinite basis, a prescribed supply of narcotics. In retrospect, this was one of the most crucial lacunae in any federal statute enacted in the twentieth century. The Treasury Department officials who administered the law assumed a negative stance and initiated several prosecutions against addicts, physicians, and pharmacists for conspiracy to violate the Harrison Act. At first the Supreme Court rebuked the Treasury Department for attempting to stop physicians from prescribing for addicts; ultimately, however, it reversed itself and narrowly ruled in favor of the anti-maintenance position. In two cases decided March 3, 1919, the Court sustained the constitutionality of the Harrison Act and ruled that a physician might not write prescriptions for an addict "to keep him comfortable by maintaining his customary use."

The circumstances of these cases, *United States v. Doremus and Webb et al. v. United States*, are revealing. Doremus was a physician who prescribed, for a price, large quantities of heroin to one Alexander Ameris, alias Myers, who was "addicted to the use of the drug as a habit, being a person popularly known as a 'dope fiend'."<sup>8</sup> Ameris's ethnic surname, use of heroin, and large habit were all negatives, summed up in the epithet "dope fiend." Dr. Webb was similarly accused of

gross overprescription; before he was arrested he averaged more than 80 morphine prescriptions a week, at 50 cents apiece. Government attorneys decried such unprofessional behavior, likening it to a barkeeper dispensing whiskey to a drunkard.<sup>9</sup> Five members of the Court agreed, and Webb's original conviction was upheld. Had either case involved only small amounts of narcotics prescribed by a reputable physician, it is highly likely that the decision would have gone the other way. Six years later, in *Linder v. United States*, the Court unanimously reversed the conviction of a respected Oregon practitioner who had prescribed one tablet of morphine and three tablets of cocaine for a stool-pigeon addict.<sup>10</sup>

The Prohibition Unit of the Treasury Department nevertheless treated *Webb* as the governing decision and pursued an aggressive anti-maintenance policy. By threats and actual prosecutions they were able to drive a wedge of fear between the legal providers (physicians, pharmacists) and the addicts. Prosecutions of those who supplied addicts might fail, as they had with Dr. Linder--but they might also succeed, as they had with Dr. Webb and numerous others. Even if a defense were successful, the potential legal fees and loss of reputation made a physician think twice before reaching for his prescription pad. Doctors, moreover, were less and less favorably disposed toward nonmedical addicts, whom they perceived as devious, troublesome, and notoriously resistant to cure.

There were, however, some physicians who continued to write prescriptions for addicts, if only on an occasional basis. They were motivated by pity, or greed, or simply by a desire to get the users off their backs and out of town. Even at the height of its powers, the Bureau of Narcotics never completely succeeded in closing off all medical supplies to addicts. A small but significant gray market of pure drugs persisted as an alternative to the black market of adulterated heroin. Some users managed to develop extensive connections in the former and stay out of the latter altogether. Still, medical sources were chancy and could not be counted on indefinitely; doctors who wrote

prescriptions too often or too openly were sure to be visited by a federal agent. That fact, as far as addicts were concerned, was the chief legacy of the Harrison Act and the 1919 Supreme Court decisions.

There was one other alternative to the black market, but it was short-lived. Following the *Webb* ruling, a number of cities and towns set up facilities to dispense narcotics to addicts. If private maintenance were disallowed, then organized, public maintenance might yet take its place. There were altogether 35 of these municipal "narcotic clinics," so named because they sold morphine cheaply to their registered patients. A few also sold cocaine or heroin. What is sometimes misunderstood about these clinics is that they were not homogeneous, that their methods of operation varied. Some were geared toward indefinite maintenance, others toward detoxification through gradual withdrawal. Some were run for profit, others merely to break even. Some were models of efficient administration, others fly-by-night operations.

One thing, however, they did have in common: all were eventually closed by the federal government, most within a year of opening their doors. Treasury Department officials, determined to eliminate both licit and illicit sources of narcotics for addicts, viewed the clinics as dangerous precedents and potential obstacles to the rigorous enforcement of the Harrison Act, as recently interpreted by the Supreme Court. Consequently, they moved to abort them through a combination of critical inspections, threats, and legal pressure. February 10, 1923, when the last clinic in Shreveport, Louisiana, was finally forced to break off maintenance operations, is as appropriate a date as any to mark the beginning of the "classic" police era of narcotic control.<sup>11</sup>

The unprecedented nature of federal narcotic policy after 1923 is underscored by the fact that alcoholic beverage prohibition applied only to manufacture and sale. Neither the Eighteenth Amendment nor the law that implemented it, the Volstead Act, barred personal use and

consumption by alcoholics or, for that matter, anyone else. National prohibition, moreover, was controversial from the start and lasted only 14 years. Large numbers of apparently normal people continued to drink; they resented both the prices they had to pay for bootlegged alcohol and the prohibitionists who meddled with their customary freedoms. The laws proved virtually unenforceable, as criminals manufactured or diverted alcohol and speakeasies spread across the land. The byproducts of Prohibition--gangsterism, corruption, and methanol poisoning--filled the front pages. Ardent supporters grew disenchanted. Powerful business and opinion leaders such as Pierre du Pont and William Randolph Hearst campaigned for repeal. A well-funded national organization, the Association Against the Prohibition Amendment, maintained a drumfire of criticism and propaganda. The public was told that the noble experiment had backfired and was creating a nation of drunkards. The war against narcotics, by contrast, was thought to be successful in reducing nonmedical addiction and was so portrayed by government officials.<sup>12</sup>

The onset of depression in 1929 handed the antiprohibitionists a new and decisive argument: money. "If the liquor now sold by bootleggers was legally sold, regulated, and taxed," one writer observed, "the excise income would pay the interest on the entire local and national bonded indebtedness and leave more than \$200,000,000 for other urgently needed purposes."<sup>13</sup> The Democrats adopted a repeal plank in 1932, and nominee Franklin Roosevelt pledged to the convention that "the 18th Amendment is doomed."<sup>14</sup> True to his word, he announced on December 5, 1933, that three-quarters of the states had ratified the Twenty-First Amendment, thereby ending national prohibition.

Virtually no one spoke up for the narcotic user, however; there was no Association Against the Harrison Act. On the contrary, the national champions of repeal, including Hearst and Roosevelt, persisted in seeing drug use as a criminal menace and condoned restrictive

measures. One "wet" argument, dating back to the early state prohibition battles, had been that frustrated drinkers would turn to narcotic drugs, which would madden and enslave them.<sup>15</sup> Drink was the lesser evil. Hostile toward addicts anyway, it suited the purposes of the antiprohibitionists to maintain them as a negative reference point, the dead end of their *ad horrendum* stories.

As for the addicts themselves, they were too few and too marginal to carry much political weight. Many of them were convicted felons and thus could not even vote. There was little that they could do about the refusal to allow maintenance, a policy that lasted more than 40 years. When the anti-maintenance regime was finally challenged, it was not by the narcotic users but by an elite group of professionals--mainly lawyers, physicians, and social scientists--who had become convinced that it was unjust and unworkable. In attacking the Bureau of Narcotics, they too invoked the alleged failures of Prohibition, arguing that it was useless and counterproductive to outlaw addictive substances. It also seemed a double standard to permit pathogens like alcohol and tobacco, while proscribing "narcotics" of lesser or unproven danger, without which regular users would become violently ill. This was a fair point but, like all rational arguments, it had its limits. There was still a powerful, visceral fear of narcotic addicts and all they stood for. It was the social and moral connotations of narcotic addiction that mattered, not just the mental and physical effects of the drugs themselves.

## LIFE UNDER ANSLINGER

The personification of the antinarcotic regime was Harry Jacob Anslinger, head (or, to his critics, "czar") of the Bureau of Narcotics. Anslinger was a minor diplomat who in the 1920s became involved with efforts to prevent liquor from being smuggled into the country. He was a competent and honest functionary in a field not known for either trait, and in 1929 he was made assistant commissioner of prohibition. After Levi Nutt,

boss of the Prohibition Unit's Narcotic Division was tainted with scandal and demoted, Anslinger took his place. When the Bureau of Narcotics was spun off as a distinct organization in 1930--partly to distance it from the furor over alcohol prohibition--Anslinger was named its first commissioner, a post he retained until 1962.

There was a peculiar, Jekyll-and-Hyde aspect to Anslinger's personality. The private man was humorous, cosmopolitan, fluent in several languages, musically accomplished, devoted to his wife, and loyal to his hometown friends. Anslinger also possessed a keen political intelligence. Like his contemporary Lyndon Johnson, he knew exactly whom to cultivate to advance his interests. Anslinger is remembered, however, not as a man of exceptional gifts or as a deft bureaucrat but as the ultimate tough cop. His appearance--bald, barrel-chested, square-jawed, and unsmiling, a sort of beefy Mussolini--had much to do with this. By all accounts Anslinger was intimidating. One visitor described him as "a man whose eyes seem to be cataloguing you--your features, build, clothes."

When explaining or defending his policies, Anslinger was given to curt aphorisms: "Wherever you find severe penalties, addiction disappears," or "The best cure for addiction? Never let it happen."<sup>16</sup> He summed up his basic approach in a similarly brief manner. "We intend to get the killer-pushers and their willing customers out of selling and buying drugs," he said. "The answer to the problem is simple--get rid of drugs, pushers and users. Period." Interdicting smuggling and jailing dealers made narcotics scarce and expensive; confining addicts made it impossible for them to spread the vice. It was, moreover, their only hope of cure. Unless addicts were confined where there was no possibility of obtaining drugs, Anslinger believed, withdrawal treatment was bound to fail. He strongly favored compulsory commitment and fretted that most states lacked statutes permitting them to pick up addicts and force them into institutions.<sup>17</sup>

Yet even this was not enough. Anslinger understood that narcotic trafficking was international in scope and required diplomatic efforts as well as strict domestic enforcement. He tirelessly attended meetings sponsored by the League of Nations, seeking agreements that would make it more difficult to smuggle drugs. In 1931, for example, he took an active role in negotiating an international pact to limit the manufacture of narcotics. Nations ratifying the treaty, of which there were 25 by 1933, were to make or import no more narcotics than necessary for estimated annual medical use, thereby reducing the surplus available for diversion into the illicit market.

Like many American diplomats of his generation, Anslinger saw the world in black and white terms. Most nations were good in that they were willing to assist others in the international campaign against the drug evil. There were also bad states, however, that not only refused to cooperate but actually used narcotics as an instrument of subversion and conquest. At the head of Anslinger's renegade list were Imperial Japan and Communist China. "Wherever the Japanese Army goes," he charged, "the drug traffic follows. In every territory conquered by the Japanese, a large part of the people become enslaved with drugs." In the 1950s and early 1960s he attacked the leaders of the People's Republic of China, accusing them of narcotic sales to the West to support their invasion of Korea and later of joining with Castro's Cuba to create an illicit drug network. It is not coincidental that all of the bad nations were, at the time Anslinger assailed them, military and ideological rivals of the United States. Narcotic policy dovetailed with foreign policy, a fact that enhanced Anslinger's prestige as well as his bureau's budget.<sup>18</sup>

The one eventuality that Anslinger had to guard against was the return of legal maintenance. This, he felt, would utterly defeat his plans to keep drugs out of the hands of addicts and their associates. The potential danger was great. The medical profession was enormously powerful and prestigious, having achieved what sociologist Paul Starr has called "sovereign" status by the 1930s.

If physicians took seriously the idea that addiction was a disease and that, lacking a sure cure, the most favorable course of treatment was maintenance,<sup>19</sup> then they might challenge, and ultimately defeat, the tenuous legal basis for narcotic prohibition. Fortunately for Anslinger, most practitioners were disinclined to rock the boat. Like the public at large, they tended to see drug users, especially heroin addicts and opium smokers, as vicious and declasse. Physicians were in any case oriented toward treating somatic disorders, and the dominant medical opinion of the day declared narcotic addiction to be a manifestation of psychopathology, that is, not a physical disease at all.

The psychopathy thesis was popularized by Dr. Lawrence Kolb, who was regarded as the leading addiction specialist of the mid-twentieth century. Like Anslinger, Kolb thought of addiction treatment as a process of institutionalization, detoxification, rehabilitation, and abstinence. Although Kolb occasionally complained to Anslinger of overly zealous law enforcement, the approaches of the two men were on the whole quite compatible.<sup>20</sup>

Kolb and his coworkers at the U.S. Public Health Service oversaw two federal narcotic farms at Lexington, Kentucky, and Fort Worth, Texas. With the closure of the municipal narcotic clinics in the early 1920s, there were virtually no government facilities for the treatment of addicts. They either had to remain at large or silt up the nation's prisons, which were ill designed to deal with their problems. The solution proposed by Pennsylvania Representative Stephen G. Porter (and enthusiastically backed by the Hearst newspaper chain) was to construct special facilities to quarantine and rehabilitate addicts. These "narcotic farms" were to be set in rural areas so that addicts could be removed from the tempting cities and set to healthful work. Money was authorized in 1929. The first narcotic farm, officially known as the U.S. Public Health Service Narcotic Hospital, was completed at Lexington, Kentucky, in 1935. A second narcotic farm was opened in Fort Worth in 1938.

Of the two, Lexington was the larger and more prominent. It was to remain the single most important treatment and research facility in the country well into the 1960s. From the beginning Lexington had a mixed institutional character. Federal prison and narcotic officials saw it mainly as a penitentiary where troublesome addicts could be isolated and confined; Public Health Service physicians saw it as a hospital where mentally disturbed addicts could be treated and rehabilitated. Architecturally, Lexington reflected the official ambivalence: its beds and wards were secured with massive gates and intricate locks. As one doctor remembered it, Lexington was "more like a prison than a hospital and more like a hospital than a prison."

As a dual-purpose institution, Lexington had a dual system of admissions. Prisoner addicts could be sent there involuntarily for confinement and treatment, but voluntary patients were also permitted to check in on a space-available basis. The problem was that volunteers could leave at any time, whereas prisoners had to stay until they were paroled or completed their terms, which might be months or years after withdrawal was completed. The staff, in other words, had little or no control over the time of release.<sup>21</sup>

The addicts who went to Lexington were of two minds about the place. To some it represented a haven, a clean and well-run institution where a user could detoxify, receive medical and dental care, and obtain counseling, decent food, work, and exercise. "When I would feel bad, or get mentally disgusted," one former user recalled, "I thought to myself, 'What am I doing? I'm a drug addict. I want to quit.' So I'd go to Lexington, and I'd come out feeling like a million dollars." Altogether he went six times. Others viewed this sort of behavior with disdain. "I never went to Lexington," boasted another addict.

*You want my honest opinion of the people who went down there on their own? They never should have been on heroin. They didn't have the ability to support a habit: either they couldn't make enough money working, or they weren't thieves, or they were afraid to deal. [Laughs.] We used to tell them, "What are you doing, going down to get rescued?"*

*I doubt if I'm mistaken, but if you'll look it up, you'll find that on average better than 75 percent of the people who went to Lexington on their own repeated. Every time things got bad-boom!—they were back. See, if you go down there once, I can understand it. Even twice, even three times I can understand, if a guy makes some kind of an effort to stay away from heroin when he comes out. But a lot of users go back to heroin immediately, and then use Lexington as a fall-back, a port in the storm.*

The estimate of 75 percent is actually conservative. Several studies showed that 90 percent or more of those released from Lexington soon relapsed. These depressing figures gave rise to a controversy, muted at first but increasingly contentious by the early 1960s. Different theories of relapse were advanced, attributing it to everything from underlying personality disorders to conditioned responses to permanent metabolic changes. Some even argued that addicts returned to drug use because they missed the intense excitement of hustling and scoring drugs; once they were "in the life," everything else seemed boring by comparison.

Whatever the reason, the fact remained that large numbers of patient-inmates speedily relapsed after their release. The Lexington and Forth Worth narcotic farms survived as long as they did largely because they were compatible with official policy. Institutions that were quasi-penal and geared toward abstinence were acceptable to Anslinger, even if they did not produce large numbers of permanent cures. What was not acceptable was any form of organized maintenance, against which he fulminated at every opportunity. Anslinger blamed the rudimentary clinic system of the early 1920s for "a tremendous rise in teen-age drug addiction" and predicted that a return to such folly would increase the narcotic problem nearly 10-fold. Maintenance was also deeply repugnant: "the idea of giving a teenager heroin for the rest of his life is unthinkable. Why not set up bars for alcoholics or department stores for kleptomaniacs or brothels for homosexuals." "You know, there are so many experts in drug addiction," he complained in 1957, "that I think if we made a survey we would find more experts than addicts."<sup>22</sup> Anslinger appealed to the conservatism and anti-intellectualism of ordinary Americans, and

also to their nativist and racial fears. He relied on the antinarcotic consensus to help him in his long, preemptive battle against maintenance; he was abetted by reporters, editorialists, political cartoonists, and filmmakers, who consistently portrayed narcotic traffickers as murderous villains. Again and again, Americans were told that the role of the government was to eliminate peddlers, not to assume their role.<sup>23</sup>

## MINORITIES AND NARCOTIC USE: THE SECOND TRANSFORMATION

Anslinger may have exploited public antipathy toward narcotic dealers and users, but he did not invent it. The antinarcotic consensus had arisen from the earlier transformation of the addict population, a real demographic event helped along by imaginative statisticians and propagandists. During Anslinger's long tenure the addict population continued to evolve in a way that further strengthened his hand. The key change was the growing use of heroin by black men.

Blacks were not considered heavy drug users early in the century. They lived mainly in the rural South, were poor, and had less access to opiates than whites, who could afford doctors and patent medicines. Black workers occasionally used cocaine, as did prostitutes and petty criminals. A few field hands smoked marijuana, and some unemployed men drank excessively, but, with these exceptions, blacks had neither a disproportionate nor a very serious drug problem. On the contrary, the prevailing racial stereotype of the narcotic addict was white or Oriental.

After World War II the situation changed completely. Middle-class whites came to "imagine that ghettos [were] filled with black men mugging whites for money to pay for heroin and then injecting this evil drug so that they can spend the rest of the day nodding away in a blissful vacuum."<sup>24</sup> Figure 1 displays the statistical basis for these fears. Not only were black addicts turning up more often in federal treatment centers

but they were being booked more frequently by the police, to the point that, by the 1950s, half or more of all narcotic arrests involved blacks. Something similar was happening in the Hispanic communities. In 1936 only about 1 percent of the addicts treated at Lexington were Hispanic; by 1966 more than a quarter were--13.9 percent being Puerto Rican and 12.2 percent Mexican.<sup>25</sup>

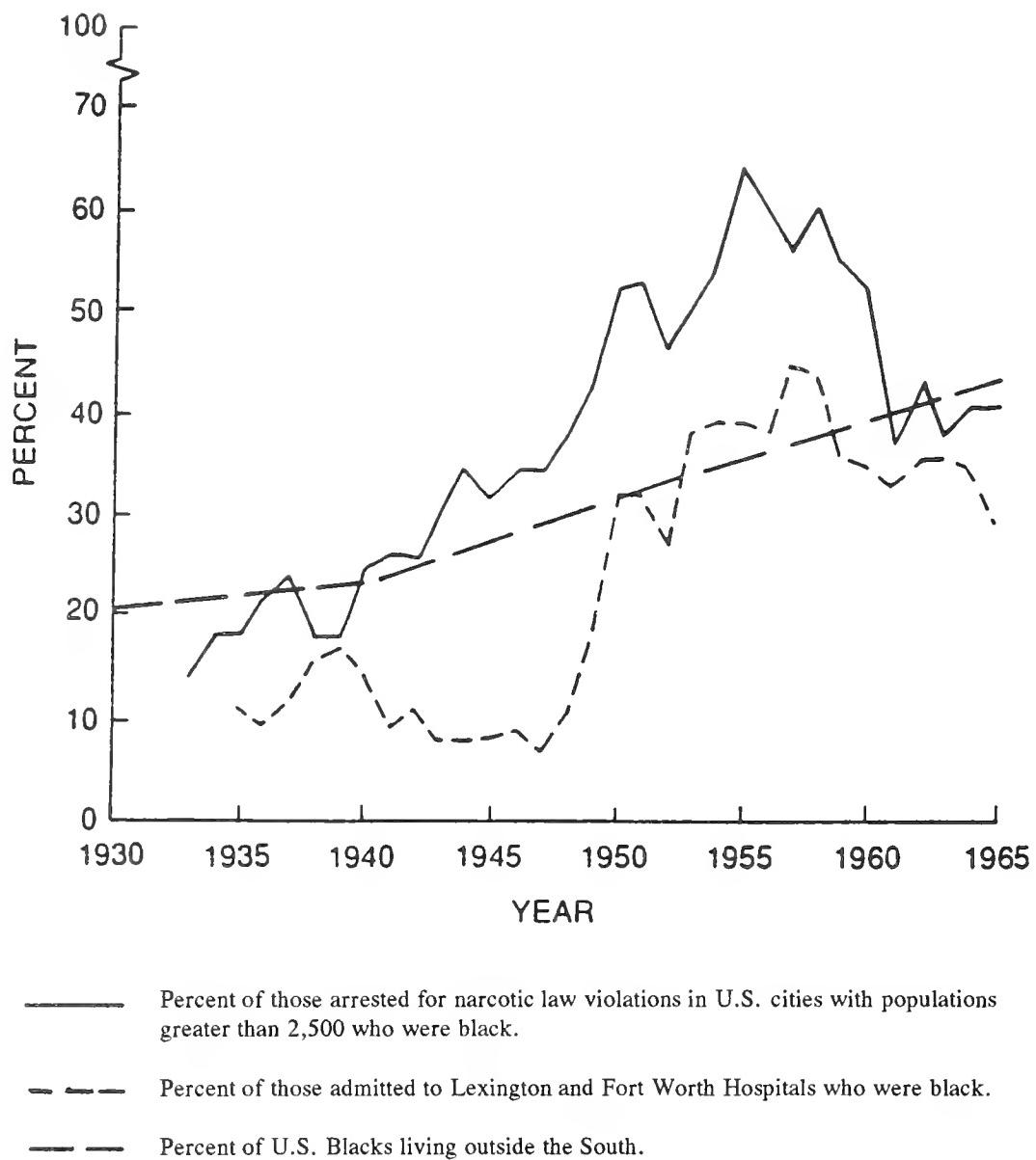
Data of this sort have been criticized as misleading because minorities are treated prejudicially and are hence more likely to end up in institutions or jails. They are particularly vulnerable during periods of racial or nativist tension, economic dislocations, or politically motivated crackdowns.<sup>26</sup> Even in normal times it is tempting for the police to fill their quotas in the ghetto; it is easier to ticket, arrest, or prosecute those who are relatively powerless.

These biases are real but in one sense irrelevant. Statistics such as these, amplified and personalized by news stories and photographs, shape public opinion, regardless of their factual basis. Rightly or wrongly, the black junkie became a stereotype, and that made a difference. Moreover, even though these percentages may overstate the degree of involvement, there is no reason to doubt that minorities were using drugs in the 1940s and 1950s in a way they had not been before. Black narcotic arrests, for example, were increasing absolutely as well as relatively, rising from a mere 362 nationally in 1933 to 4,262 in 1950 to 11,816 in 1965. An increase of that magnitude, sustained over a long period of time, is due to something more than prejudice. Black writers and intellectuals were also sounding the alarm. Claude Brown's *Manchild in the Promised Land* (1965) contains a bitter account of the "shit plague" that befell New York City's neighborhoods in the early 1950s. Not only Harlem, "but in Brooklyn, the Bronx, and everyplace I went, uptown and downtown. It was like horse had just taken over."<sup>27</sup>

It is not hard to understand why this happened. Black narcotic use was a concomitant of

urbanization. During 1915 to 1930, and again during 1940 to 1960, millions of blacks left the countryside for larger towns and cities. Jim Crow, disfranchisement, poverty, boll weevils, and agricultural mechanization made it difficult to stay; higher paying industrial jobs, especially during the war years, made it tempting to leave. Some migrants settled in southern cities; most eventually moved on to the North or West. Three major routes developed: from the south Atlantic seaboard toward the northeast urban corridor; from Mississippi toward Chicago; and from Texas and Louisiana toward California. In 1910 not a single city in the country contained 100,000 blacks. By 1960 New York City alone had more than a million. In 1910, 73 percent of the black population was rural. In 1960, 73 percent was urban.<sup>28</sup>

The blacks who fled the South were mainly young, unattached adults whose futures lay before them. They left with high hopes, singing hymns like "Jesus Take My Hand" and "I'm on the Way." What actually awaited them, the ghetto slum, has been likened to the frying pan instead of the fire. Not only did they have to face the classic dilemma of an uprooted peasantry--how to adjust to the city when what they knew was the land-- but to do so under the worst possible circumstances, crowded into stinking, overpriced tenements.<sup>29</sup> They also had to cope with the usual array of urban vice figures: pimps, prostitutes, thieves, con men, numbers runners, and all manner of drug retailers, from marijuana distributors like the legendary white hipster Milton Mezzrow to black opiate users and dealers like Malcolm Little, later Malcolm X. Disoriented and demoralized, the newcomers were exposed to narcotics in a way they had never been before. So were their children, particularly those who had left school, were out of work, and spent their time on the street. The result could easily have been predicted: a growing incidence of black heroin addiction, particularly among the traditional high-risk group of single males in their late teens or early twenties.

**FIGURE 1: Indices of narcotic use by Blacks.**

SOURCES: P. Iiyama, S.M. Nishl, and B.D. Johnson, *Drug Use and Abuse among U.S. Minorities: An Annotated Bibliography* (New York: Praeger, 1976), 5; J.C. Ball and C.D. Chambers, eds., *The Epidemiology of Opiate Addiction in the United States* (Springfield, Ill.: Charles C Thomas, 1970), 180; Bureau of the Census, *Historical Statistics of the United States: Colonial Times to 1970, Part 1* (Washington, D.C.: U.S. Government Printing Office, 1975), 22.

To say that such an event was predictable is not to indulge in historical hindsight. There was ample precedent for what happened to the black urban community. It had happened before to other immigrants living in the same or similar neighborhoods. White ethnic addicts who started using narcotics in the 1920s and 1930s had substantially the same experiences as blacks who began in the 1940s and 1950s. They grew up in or moved to neighborhoods where drugs could be procured; they were on their own or unsupervised; they had friends who were users; they yielded to curiosity or peer pressure and tried it for themselves. Thus, the ethnic slum, matrix of heroin use from about 1910 on, continued to spawn illicit narcotic use throughout the twentieth century.<sup>30</sup> When the color of the faces in the tenement windows changed, so did the color of the addicts on the street.

Several factors, however, made the immigration-slums-narcotics tangle worse for blacks than for previous groups. First, because of their color, blacks had been and continued to be the objects of especially virulent racism. To the extent that this racism translated into educational and occupational handicaps, and to the extent that unemployment and poverty were conducive to drug and alcohol abuse, urban blacks were especially vulnerable. Living for the present made more sense for those who felt excluded from the future. Partly because of this legacy of racism, blacks had fewer political and organizational resources than other groups. There was, for example, no black counterpart to the New York Kehillah's Bureau of Social Morals, which monitored drug dealers in the Jewish immigrant community.<sup>31</sup> Even the Mafia, the country's leading narcotic importer and wholesaler, kept the peddlers off its home turf. Ghetto blacks also had fewer familial resources. Why this was so has become a political and intellectual cause celebre; the fact remains that minority family dislocation did occur and it did contribute to addiction. *The Road to H*, a major study of young heroin users in New York City in the 1950s, found that 97 percent of addicts' families were characterized by "a disturbed relationship between the parents, as evidenced by

separation, divorce, open hostility, or lack of warmth and mutual interest." The mother was the most important parent; about half the fathers often presented "immoral models through their own deviant activity with respect to criminality, infidelity, alcoholism, and the like."<sup>32</sup> Keeping teenagers away from drugs in an environment in which they are plentiful requires especially active, watchful parenting. It is not likely to be done very well if parents are distracted, absent--or busy shooting up in the bathroom. Finally, there was the permanence of the black ghetto. Many of the white urban immigrants and their descendants were able to distance themselves from the tenements, moving to better quarters in safer neighborhoods and eventually to the suburbs. New York City's Jews, for example, went from Manhattan's chaotic Lower East Side, to Brooklyn and the Bronx, to Long Island, Westchester County, and New Jersey. Each step took them farther away from the primary illicit narcotic markets; indeed, to distance themselves from drugs and crime was one of the reasons suburbanites moved in the first place. Low-income blacks were not as fortunate. Even as the Civil Rights movement achieved its judicial and legislative triumphs, a collective decision was made to abandon blacks in the inner city, to leave them behind with inferior schools and inadequate services in an environment virtually assured to perpetuate poverty. This was the result, not of a single grand conspiracy but of a thousand private, uncoordinated ones: restrictive covenants, realtors' whispered advice, bankers' lending practices. The federal government generously subsidized the fleeing whites through its tax, transportation, and mortgage policies. Urban abandonment soon developed its own momentum: as inner-city conditions progressively worsened, pressure grew on the remaining whites to escape beyond municipal lines, taking their tax dollars with them. Educated and upwardly mobile blacks were able to follow them to the suburbs, but those who were unemployed or underemployed had to stay behind. The decaying neighborhoods in which they lived were areas of heavy drug trafficking and use. Heroin became a staple in the ghetto economy, and black children grew up around older users who were both role models and potential initiators.

Continued exposure, persistent discrimination, and progressive familial breakdown assured that subsequent generations of urban blacks would also suffer high rates of addiction. What began as an epidemic among black youth in the late 1940s and 1950s has long since become endemic to the urban underclass.

The growing involvement of blacks and Hispanics with narcotics and the consequent racial transformation of the addict population did not go unnoticed in high places. Anslinger himself emphasized this development. "Fifteen years ago, the Lexington and Fort Worth Hospitals had mostly white patients," he pointed out in 1957. "Today, they are filled with Negro addicts. What happened to the white addicts? You don't see them." Asked about the postwar rise in youthful addiction, Anslinger responded, "The increase is practically 100% among Negro people in police precincts with the lowest economic and social standards. . . . There is no drug addiction if the child comes from a good family, with the church, the home, and the school all integrated."<sup>33</sup>

There was truth in what Anslinger said, however bluntly he expressed it. Historically, children who were not poor, who were raised in intact families and socialized by middle-class institutions, were impervious to heroin. He did not, however, advance to the conclusion implied by his analysis: doing something about black addiction meant doing something about black economic and social conditions. Instead, Anslinger fell back on what he knew best, enforcement. During the 1950s he pushed for ever tougher sanctions against traffickers, believing that the ultimate solution lay in choking off the illicit supply. Congress, alarmed by stories of teenage users, the darkening racial cast of institutionalized addicts, the postwar renaissance of the Mafia, and the alleged trafficking of nonwhite communist countries like China, was in a mood to agree. In 1951 it passed the Boggs Act and in 1956 the Narcotic Control Act, providing progressively stiffer, mandatory sentences for possession and sale. The inflexible provisions of these laws sometimes resulted in blatant miscarriages of justice. In one instance a

Chicano epileptic with an I.Q. of 69 was given two life terms for selling heroin to a 17-year-old provocateur; in another a black veteran with no previous record was sentenced to 50 years without parole for selling marijuana. Many states, nevertheless, followed suit, passing "Little Boggs Laws" that pegged minimum prison terms at or beyond the federal levels. A 1956 Louisiana statute provided mandatory sentences ranging from 5 to 99 years for persons who sold, possessed, or administered narcotics. In Texas possession of marijuana was punishable by 2 years to life. These were not isolated events; across the country nonfederal narcotic prosecutions were up sharply during the 1950s.<sup>34</sup>

### THE END OF THE CLASSIC PERIOD, 1960-1965

Historians who have studied American narcotic policy are agreed that the 1950s marked the zenith of the punitive approach. The "new spasm of concern" felt during this decade translated into "increased regulation in familiar patterns," comments H. Wayne Morgan. "On the surface, the consensus against drug use and for enforcement seemed stronger than ever."<sup>35</sup> Yet by 1965 the consensus had eroded and the old order, especially the categorical denial of maintenance, had been successfully challenged. Why did this happen?

The question must be answered on several levels. In the broadest terms, the Bureau of Narcotics and allied organizations were unable to bring about a lasting solution, as urban narcotic addiction remained a serious, widely publicized problem in the early 1960s. A Vietnam-like disillusionment began to set in: despite decades of escalating sanctions, narcotics were still finding their way onto the streets of America's cities. It was not for want of trying that the Bureau of Narcotics failed to stop the traffic permanently; under Anslinger it was one of the country's more efficient police organizations and the one most feared by organized crime. The problem lay in the nature of the case. Narcotics are highly compact, easily

hidden substances. Two kilos in a false-bottomed suitcase are worth a small fortune. They are also reasonably easy to acquire because opium is a major cash crop and only a fraction of the world's harvest is sufficient to supply American addicts' needs.<sup>36</sup> From the smugglers' vantage the United States is ideal: it is an open society with excellent transportation facilities, 88,633 miles of tidal shoreline, and two long boundaries with Mexico and Canada. Traffickers would forego these geographical advantages if deterred by threat of punishment, but here the bureau encountered a paradox. Successful prosecutions take suppliers out of circulation and heighten the level of risk. Given what economists call an inflexible demand curve (addicts are generally steady customers), restrictions on supply and increased risk quickly translate into higher prices. The profits to be made from selling adulterated heroin to addicts tempt other criminals to jump into the market--criminals who are generally more ruthless and better organized than those previously arrested or deterred.<sup>37</sup> Narcotics enforcement is like antibiotics: it wipes out disease-producing organisms, but over time it also produces more resistant strains.

Anslinger realized that the way out of this paradox was to simultaneously reduce demand by isolating and then curing addicts. Fewer customers would mean smaller profits for dealers, and at some point the illicit trade would cease to be worth the risk. The catch was that Lexington-style institutions failed to effect many permanent cures: as previously noted, addicts often went through several times, relapsing after every treatment. Narcotic wards were not without value: detoxification brought respite from the street grind and helped addicts keep their habits within manageable bounds. But the generally high relapse rates provoked skepticism and lent credence to the cliché, "once a junkie, always a junkie."

Dissatisfaction with the big, revolving-door institutions eventually led to a search for other programs that might help addicts. One possible alternative was Synanon, a therapeutic community

that evolved in Ocean Park, California, in the late 1950s under the direction of Charles Dederich, an ex-alcoholic. Dederich made no bones about the authoritarian nature of Synanon; he consciously recreated an autocratic family environment to keep people in line. He also relied heavily on group encounters led by a "Synanonist," or experienced former addict. These encounters were intended to make the participants come to terms with their feelings, to assume responsibility for their own lives, and to learn to deal with their problems without recourse to drugs or alcohol. Once they could do that, they could theoretically return to the world and lead "straight" lives.<sup>38</sup>

Synanon was a relatively small-scale operation. Its real significance was that it inspired several physicians, clergymen, and social workers to establish "second-generation" therapeutic communities throughout the country. These were patterned after Synanon but incorporated significant individual variations. Several of the most important of these programs, such as Daytop Village, Odyssey House, and Phoenix House, had their inception in the middle 1960s. They did not expand rapidly, however, until the later 1960s and early 1970s, when the Lexington approach was officially discredited, the country was in the midst of a youthful drug epidemic, and private and public funding for community drug treatment programs of all sorts was readily available.

It is important to point out that, although the leaders of the therapeutic community movement criticized the impersonality and ineffectiveness of existing addiction treatment programs, they shared the traditional assumptions that abstinence was the ultimate goal and that the police should suppress the illicit narcotic traffic. Some critics, however, began to question the very moral and political bases of American narcotic policies. Increasingly in the 1960s, liberal commentators asked why the country had a narcotic problem. Were drugs evil because they were physical and social pathogens? Or were they pathogens because illegal, hence adulterated and exorbitantly priced? Would addicts behave differently if the maintenance taboo were broken and they could receive cheap, pure

medication? Specifically, would maintenance reduce the number of crimes addicts committed? Would it provide a way out of a destructive subculture and back into the productive world of family and work?

These were not new questions; they had been pointedly asked by the pioneers of organized maintenance, physicians like Charles Terry and Willis Butler. But now, after 40 years of apparently self-defeating police solutions, they were being raised again by such critics as the sociologist Alfred Lindesmith. Like most twentieth-century liberals, Lindesmith was a negative utilitarian. He believed that if a law produced many costs and few benefits, it was irrational and should be modified or abolished. This belief was the premise of his influential 1965 study, *The Addict and the Law*, in which he argued that American addicts were both more numerous and more "impoverished, degraded, and demoralized" than elsewhere in the Western world. He cited police estimates that up to 50 percent of big-city crime was due to addicts hustling to support their habits.<sup>39</sup> By contrast, the British system of medical maintenance had resulted in neither serious crime nor an inordinate amount of addiction. Lindesmith and others essentially charged the Narcotics Bureau with benighted prohibitionism, resulting in huge costs to both users and society. "The American narcotics problem," summed up Marie Nyswander in 1965, "is an artificial tragedy with real victims."<sup>40</sup>

If the crime issue was one fault line along which the narcotic consensus fractured, then marijuana was another. Marijuana had come under the Bureau of Narcotics' jurisdiction as a result of the 1937 Marijuana Tax Act, passed by Congress at Anslinger's urging. Like cocaine, marijuana was identified with an internal minority (Mexicans) and alleged to produce insanity and violent, unpredictable behavior. Later, its prohibition was rationalized by what came to be known as the stepping-stone hypothesis: marijuana was not in itself habit forming, but its use led to drugs that were--like heroin. "The danger is this," testified Anslinger in 1951, "over 50 percent of those

young addicts started on marijuana smoking. They started there and graduated to heroin; they took to the needle when the thrill of marijuana was gone."<sup>41</sup>

Again, Anslinger had appropriated a partial truth. Minority addicts treated at the federal narcotic hospitals typically smoked marijuana a year or two before using heroin. It did not follow, however, that marijuana led ineluctably to heroin. Many adolescents from the same milieu, including delinquents and gang members, smoked marijuana but refrained from trying opiates.<sup>42</sup> Nor was there any scientific evidence to substantiate the horror stories Anslinger was fond of circulating. Growing numbers of college-age marijuana smokers discovered this for themselves in the 1960s. Marijuana might not be good for their lungs, or their memories, or their waistlines, but neither did it lead to rape, madness, or axe murder. Moreover, if the authorities had misrepresented the dangers posed by marijuana, what of the other drugs they controlled? Just what was wrong with "narcotics?"<sup>43</sup>

What, in fact, was wrong with all the great American taboos? The ultimate basis for the suppression of nonmedical drug use lay in the realm of moral assumptions. Americans of the classic period were, to a degree unknown today, governed by a popular moral code, postulated on the self-evident correctness of patriotism, self-discipline, hard work, self-reliance, family stability, personal honesty, and self-restraint.<sup>44</sup> However dishonored in practice, these virtues were consistently affirmed by religious and civil institutions and served to justify the proscription of drugs, just as they had earlier served to rationalize the prohibition of drink. During the 1960s, however, these traditional values--Harry Anslinger's values--were increasingly questioned. The principal challenges came from the mass media, the youthful counterculture, and skeptical "new class" intellectuals who were disenchanted by the status quo and optimistic that they could replace it with something better. Whatever the merits of their critique, American society did change, becoming noticeably more permissive and

secular. Although this social revolution did not peak until the 1970s, it was well under way by the mid-1960s, and it did not augur well for strict narcotic control.<sup>45</sup> Recall Anslinger's remark that maintaining addicts with drugs was like pandering to homosexuals. That analogy would be effective with a traditionalist, one who was instinctively homophobic. But for someone beginning to doubt the received wisdom, wondering if the suppression of homosexuality might not itself be unfair and counterproductive, the argument would not carry much weight. It might even backfire, lending credence to the belief that America (or Amerika, as it was soon to be called) was blindly opposed to all forms of social and political liberation, of which drug use was but one instance.<sup>46</sup>

As for narcotic officials, they had more on their minds than the unfavorable turn of the zeitgeist. A more immediate problem, which Anslinger concealed but never resolved, was their shaky legal foundation. The denial of maintenance was predicated on distant and narrowly decided Supreme Court cases; there were also contrary precedents, like the *Linder* ruling. These weaknesses were not apparent to the general public, but they were known and discussed within the legal and medical communities, together with the more general question of the propriety of maintenance. The eventual outcome of this discussion was *Narcotic Drugs: Interim Report of the Joint Committee of the American Bar Association and the American Medical Association on Narcotic Drugs* (1958). Authored by a panel of physicians, lawyers, and judges, and based on three years of research in the United States and Britain, the *Interim Report* was a temperate critique of the police approach with suggestions for further research and trial programs. Doubting "whether drug addicts can be deterred from using drugs by threats of jail or prison sentences," it recommended the establishment of an experimental outpatient clinic that might, under certain circumstances, supply addicts so they would not have to patronize illicit dealers.<sup>47</sup>

Anslinger, who saw this guarded proposal as the hole that would sunder the dike, immediately

plugged it with his fist. Denouncing the committee's plan as "so simple that only a simpleton could think it up," he launched a campaign of vilification against his opponents. The piece de resistance was *Comments on Narcotic Drugs* (1958), a rebuttal by the "Advisory Committee to the Federal Bureau of Narcotics" that Anslinger quickly assembled. Clinics were portrayed as proven failures, liable to spread addiction and to provide comfort to the nation's communist enemies. The solution was not less punishment but more: "Only under the impact of heavy prison sentences can we hope to rout the scum of the criminal world." And routing they deserved, because what they were really peddling was "murder on the installment plan." Experts who disputed this approach were feckless dreamers, or worse. As far as Anslinger was concerned, they ought to join the addicts in jail. His bureau spokesmen openly accused the critics of Hitlerian "Big Lie" tactics and of endangering the health and morals of the nation.<sup>48</sup>

It did not work. Anslinger not only failed to discredit or suppress the report--it was published in 1961 as *Drug Addiction: Crime or Disease?* and went through seven printings by 1969--but his tactics backfired and brought unfavorable publicity to the bureau. "The whole tenor of the [rebuttal] document," wrote Stanley Meisler in *The Nation*, "indicates Anslinger does not want to win the discussion as much as he wants to eliminate it."<sup>49</sup> Historian David Musto has commented, "the bureau's vituperative attack . . . can be seen as a desperate response to the belief that, regardless of congressional support and official bureau statements, its control of narcotic enforcement in America was beginning to slip."<sup>50</sup>

The year 1962 brought further slippage. On June 25 the Supreme Court decided, in *Robinson v. California*, to strike down a California statute making addiction to the use of narcotics a misdemeanor, punishable by 90 days to a year in the county jail. The Court, recalling the language of *Linder* that addicts "are diseased and proper subjects for [medical] treatment," condemned prison as a cruel and unusual punishment for the

sick. "It is unlikely that any State at this moment in history," Justice Potter Stewart wrote, "would attempt to make it a criminal offense for a person to be mentally ill, or a leper, or to be afflicted with a venereal disease."<sup>51</sup> The decision did not do the appellant, Lawrence Robinson, much good--he had died in 1961--but it did scotch Anslinger's long-standing ambition to take addicts out of circulation simply because they were addicts.

The addiction-as-disease theme was being sounded elsewhere as well. In 1962 Lawrence Kolb published *Drug Addiction*, a collection of articles and essays pointedly subtitled *A Medical Problem*. Kolb, once Anslinger's wary collaborator, had grown increasingly disenchanted with punitive tactics. He now called openly for Americans to rid themselves "of the fury that propagandists have injected into our laws, administrative practices, and attitudes concerning addiction."<sup>52</sup> Even as Kolb was airing his doubts, the chief perpetrator of the narcotic fury was being quietly eased from power. In 1962 Anslinger was forced to retire, having reached the age of 70. He was succeeded by the Narcotics Bureau's deputy commissioner, Henry L. Giordano. Anslinger did not disappear from the scene altogether; he put in an appearance at a large White House Conference on Narcotic Drug Abuse in September 1962 but seemed uncharacteristically subdued.<sup>53</sup> This same conference recommended the establishment of a presidential commission, which met and issued its report the following year. Among its recommendations were more flexible sentencing, wider latitude in medical treatment, and more emphasis on rehabilitation and research.<sup>54</sup>

Heresies were spreading about the land now, and these even bore the imprimatur of a presidential commission. The time was ripe for someone to heed the many calls for research and actually put together an experimental maintenance program. That task was accomplished in 1963-1964 by Marie Nyswander, a psychiatrically trained clinician who had experience treating addicts, and Vincent Dole, a metabolic disease specialist who had no such experience but who brought a fresh

approach to the problem. Dole began what he was later to call "humdrum observational research" with several basic pharmacological and physiological questions: What effects do opiates actually have? Why are they bad for people? What is wrong with narcotic maintenance? The answer to the latter, he discovered, was that it was extremely difficult to stabilize the amount and frequency of the dose. Subjects to whom he gave morphine constantly badgered him for more. He was prepared to concede the wisdom of the anti-maintenance philosophy when he made a chance discovery. The patients to whom he gave methadone, a long-acting, synthetic opiate, did not behave in an objectionable way. They were not preoccupied with drugs and began to turn their attention to conventional pursuits like sports or work or school. Although thoroughly addicted, their behavior appeared quite normal.

Ultimately, Dole and Nyswander hypothesized that addicts had undergone a permanent metabolic change, that they needed narcotics in a visceral way, the way a diabetic needs insulin. This explained relapse and why abstinence was not a realistic goal. But methadone maintenance could satisfy the underlying craving and enable the addict to lead a normal and productive life. Methadone could be taken orally once a day, so addicts would not have to constantly inject themselves with possibly contaminated needles. At a sufficiently high dose, methadone blocked the euphoric effects of a shot of heroin, so that addicts would not be tempted to continue using illegal narcotics. Nor would they need to because methadone, itself a narcotic, prevented withdrawal sickness. Finally, methadone was cheap and legal. Addicts could escape the grind of hustling and scoring, thereby improving their lives and reducing the amount of crime.

There was, inevitably, a reaction as both the premises and results of methadone maintenance were called into question. Critics said that the hypothesized metabolic change was mere speculation; that methadone was just a quick chemical fix, substituting one drug for another; and that it failed to significantly reduce criminal or

antisocial behavior because it ignored the underlying problems of addicts--inferior or abnormal personalities, broken families, anomie, inebriety, ghetto squalor, deviant peers, structural unemployment, and so on down the list. Others charged that methadone did too much, that it was an insidious form of social control aimed at turning restive inner-city minorities into harmless zombies; or that it was dangerous--because large amounts of methadone were diverted into the black market and consumed by those who might not otherwise have used drugs. Probably the fairest and most accurate thing to say about these criticisms (and this is just a partial list) is that they arose from mixed motives. There were real and unresolved problems with methadone maintenance, but there were also vested interests to be defended, especially by those whose funding and prestige were tied to competing addiction theories and treatments. Medical controversies are seldom fought on purely scientific grounds, and methadone is a classic case.

The whole controversy might never have arisen if the Bureau of Narcotics had managed to block Dole's experimental research. This it failed to do. Dole defied the agents sent to harass him, at one point suggesting that they take him to court "so we can have a determination on this point." The bureau demurred. It might well have prevailed against an unscrupulous doctor writing prescriptions for cash, but its chance of winning against a distinguished scientist, backed by a major research institution, with a liberal majority on the Supreme Court and in a climate increasingly hostile to the police approach, was effectively nil. The bureau also failed to prevent the program from expanding. In 1965 a ward in the Manhattan General Hospital was given over to methadone maintenance, as Dole and Nyswander came under the sponsorship of the New York City health department. Although minuscule in comparison to what it would become in the early 1970s, methadone maintenance was by 1965 officially and permanently established. It was also beginning to attract widespread and favorable attention, both in medical journals and in popular periodicals such as *Look*, *Time*, *Newsweek*, and *Science Digest*.

Marie Nyswander was even accorded a profile in *The New Yorker*. The anti-maintenance regime was over.

## DRUG POLICY AND DRUG USE SINCE 1965

American narcotic policy from the early 1920s until the middle 1960s had two key objectives: the quashing of legal maintenance and the suppression of illicit narcotic transactions through vigorous police enforcement. What has happened since then has been a qualified abandonment of the first goal, *but not of the second*. Substances like heroin are still outlawed.<sup>55</sup> This result was intentional: the liberal supporters of maintenance never espoused, nor could they have achieved, a libertarian resolution of the problem. The government was not about to get out of drug enforcement and proclaim *caveat emptor*. Most liberals were perfectly willing to see addicts, whom they regarded as victims, treated in clinics, and traffickers, whom they regarded as criminals, sent to jail. This arrangement is at best paradoxical; some critics have described it as confused and contradictory.<sup>56</sup> What about the addict who is also a dealer? Or the addict who is a predacious criminal, before, during, and after treatment? Or the addict who diverts methadone into the black market? Methadone programs have reduced the frequency with which their clients violate the law, but they certainly have not eliminated all of their legal or behavioral problems.<sup>57</sup>

These difficulties are not unique to narcotic policy. In virtually every area in which liberals successfully challenged restrictive policies in the 1960s and 1970s, similar quandaries have arisen. Gambling is a good example. State-run lottery games and other forms of legal gambling are now freely available and widely advertised. But illegal gambling has not disappeared, as some liberals hoped or assumed; the police still have plenty of sports bookies and *bolita* operators with whom to contend. The public, meanwhile, gets a decidedly mixed message: some forms of gambling are acceptable, but others are not. The same is true of drug use. Classic-era narcotic policy, despite its

faults, was at least consistent. Its message was unambiguous: drugs are bad for you. This was one reason why proponents of therapeutic communities remained deeply suspicious of methadone maintenance. It contradicted, both symbolically and actually, the traditional goal of abstinence. "It's just another political expediency," charged Dr. Judianne Densen-Gerber, founder of the Odyssey House therapeutic community. "There's no reason to change a heroin user to methadone, just as there's no reason to change a scotch drinker to cheap wine. . . . People should not have a dependency disease. They should be able to make decisions without being controlled by their need for a substance."<sup>58</sup>

It was ironic, then, that Richard Nixon, who styled himself a hard-liner and a moral conservative, should have been the president to preside over the rapid expansion of methadone maintenance. On June 17, 1971, he delivered a special message to Congress on drug abuse prevention and control. Until the recent past, Nixon observed, narcotic addiction had been viewed as a "class" (i.e., minority) problem, but now it affected many groups, including soldiers in Vietnam. Heroin addiction was growing rapidly and was responsible for a costly wave of urban crime. He proposed to meet this national emergency with additional, federally financed efforts to reduce narcotic supply and demand. To ensure that the task of demand reduction was carried out in a coordinated manner, Nixon announced the creation of the Special Action Office of Drug Abuse Prevention (SAODAP, pronounced say-oh-dap), to be located within the Executive Office and answerable directly to the President. SAODAP was given a remarkably broad charge: overall responsibility for drug treatment and rehabilitation, as well as prevention, education, training, and research programs. Only law enforcement and diplomatic efforts were outside its control.<sup>59</sup>

SAODAP's first director was Dr. Jerome H. Jaffe. His selection was not coincidental. During 1970 and 1971 several White House staff members, including Jeffrey Donfeld, Egil Krogh, and John

Ehrlichman, had become convinced that methadone maintenance offered the best prospect for reducing narcotic-related crime and that any such reduction would pay substantial political dividends in the upcoming election. It would also eliminate a political liability, insofar as Nixon, who had made domestic lawlessness the centerpiece of his 1968 campaign, was under some pressure to show a tangible reduction in urban crime. Jaffe was known as a methadone advocate. "The White House staff was quite aware of my view that the use of methadone could no longer be viewed as 'a little experiment,' but needed to be incorporated into an overall approach to reducing the social cost of heroin addiction," Jaffe recalled. "It may be that I was selected to articulate and give academic credibility to the conclusion the White House staffers had already reached."<sup>60</sup> What Jaffe did in practice was to expand both maintenance *and* nonmaintenance programs, with the hope that narcotic addicts would avail themselves of one or the other approach. The result was that, while therapeutic communities and other nonhospital, abstinence-oriented programs were growing rapidly in the early 1970s, so too were their philosophically and clinically opposite numbers, the methadone maintenance programs. Between June 1971 and March 1973 the number of federally funded methadone patients doubled.<sup>61</sup> Counting both federal and nonfederal programs, there were 80,000 persons enrolled in methadone maintenance by October 1973.<sup>62</sup>

Despite SAODAP's imprimatur and increased funding, there was still a great deal of suspicion and hostility toward methadone within the federal bureaucracy. This attitude was manifest in a barrage of detailed regulations governing dosage, duration of treatment, and security. (Item: vaults containing the methadone supply shall have locks "resistive . . . to radiological attack for twenty manhours."<sup>63</sup>) Frustrated methadone proponents argued that such micromanagement reduced the impact and effectiveness of the maintenance programs. The late Marie Nyswander, when interviewed in 1981, was amused to find herself "sounding like a Republican" on the issue of federal controls. "I don't think there's any

question about it," she said. "If we had decent treatment, in *all* the ways people could be treated -- clinics, hospitals, doctors -- then we'd probably take in the majority of addicts. But right now methadone is operating at only 30 to 50 percent of its potential."<sup>64</sup> Why not, she urged, permit stable, long-term patients to simply receive several months' supply from a private physician? For Nyswander, contemporary narcotic policy was insufficiently reactionary. That is to say, the clock should have been turned all the way back to 1914, when doctors still had wide latitude in maintaining addicts, rather than to 1919-1923, when a handful of municipal programs struggled to treat patients in a hostile regulatory environment. Indeed, the 1970s and 1980s might be aptly described as the New Clinic Era, with methadone maintenance understood as the vehicle of a long-delayed but ultimately limited counter-revolution.

Not all of methadone's limitations were due to bureaucratic meddling, however. Dr. Robert Newman, who presided over the expansion of methadone maintenance in New York City from 1970 to 1974, also emphasized the strength of community opposition. The first twenty clinics breezed through, he recalled, but "the next twenty were pretty darn tough. . . . Finally, it became an insurmountable problem when the neighborhoods were given almost veto power. Since 1975 I think there's been one clinic opened in the City of New York, and that over tremendous opposition." Newman was chagrined to discover that methadone was a political lightning rod:

*I remember trying to open one clinic up in the Bronx, and speaking at a community meeting. I talked for forty-five minutes about methadone and I thought I did an absolutely great job. I was sure I had everybody convinced. When I asked for questions, the first one was from some lady in the back who said, "Why don't you pick up our garbage?" I said, "What do you mean, pick up garbage?" I thought that the woman was crazy, or that I was in the wrong meeting. I said, "This isn't the Sanitation Department; we're talking about opening up a methadone clinic." She said, "You know what I mean. You're the City of New York, and you haven't picked up my garbage in two weeks." I said, "Lady, that's another department." She said, "Yeah, I know, you're always passing the buck; whoever we talk to, it's never their department, it's somebody else's. Well, by God, you haven't picked up my garbage and I'm not going to allow you to do what you want to do up here with this methadone clinic."*

*Then there was the hatred and the concern regarding addicts and addiction. It's a lot of things: it's race and class; it's fear, the realization that addicts have to commit crimes to*

*support their habit; and it's a resentment that people are feeling that good three, four, five times a day. It's hard to express this hostility, because there's nothing to focus against. But a methadone clinic brought all these problems together. It was a building, in front of which you could picket, or wheel your baby carriages, or go to the press about. I think people really wanted to express their hostility against a problem that was so evanescent that they couldn't do it any other way.<sup>65</sup>*

Finally, there were the addicts themselves, many of whom balked at entering treatment programs. There were garbled fears about methadone, complaints that it would "get into the bones" or render patients dependent for life. "It's very, very hard to quit methadone," remarked one older patient. "When a guy gets to be my age, getting off methadone pret' near kills you. I think methadone's got me hooked until I die." He conceded, however, that methadone had its good points: "Like, I used to live in Harlem. I knew a whole lot of people that used to be tramps. They wouldn't clean up, or wouldn't try to do nothing for themselves, sleeping out there on the street. Since this methadone came out you see them nice and clean, with a tie on and shoes shined, and working every day."

This amounts to a summary of the original thinking behind methadone. The drug may be a powerful narcotic and treatment may be indefinite, but what does it matter if the patients turn their lives around? The problem, however, was that not all addicts wanted to turn their lives around, nor were they necessarily enamored of shiny shoes and daily work. They regarded methadone, or for that matter any other treatment program, as a form of surrender. An addict who sought treatment had to admit to himself and his peers that he no longer had enough spunk to stay on the street and support a habit. Ethnographic studies of untreated addicts have shown that their self-image is often that of an accomplished hustler, street-wise and disciplined enough to keep themselves in money and drugs. The "righteous dope fiends" consider addicts in methadone programs ("methadonians," "zombies," "blimps," "meth-heads" or "murdocks") to be losers, while those who enter therapeutic communities are totally *infra dig*. One long-time user started to have foot trouble as he approached his middle fifties. His hustling suffered, and in

desperation he sought help at Synanon. He quickly left. "Synanon wasn't for me," he exclaimed. "I wouldn't stand being thrown down the shit bowl [degraded] by those foul garbage junkies, snitches, winos, and sissies."<sup>66</sup> These attitudes have persisted and help to explain why more users do not take advantage of treatment opportunities. They also explain why, once in treatment, many patients leave or fail: they are constantly reminded of and tempted by their old self-image, the smooth operator leading a free and exciting life. There is more to becoming an ex-addict than detoxification.

For all of these reasons the treatment revolution of the late 1960s and early 1970s has proved to be something of a disappointment. According to one 1987 estimate, only 7 percent of the approximately 2.5 million Americans who had a serious drug problem were in treatment. Many of those who remain untreated were "undergoing progressive and chronic physical deterioration, as well as committing crimes and being involved in accidents that lead to injuries to themselves and others." There was an economic cost associated with this, as well as a human one. It is far less expensive for an addict to be in a treatment program than in and out of hospitals and jails.<sup>67</sup>

It is less expensive, that is, if the untreated addict survives at all. One particularly frightening development has been the spread of AIDS, a uniformly fatal disease. Caused by the human immunodeficiency virus (HIV, formerly known as LAV or HTLV-III), the virus is spread among intravenous drug users through the sharing of syringes and needles.<sup>68</sup> There is no evidence that the virus can be spread through casual contact or the use of noninjected drugs; however, it can be spread through both homosexual and heterosexual contact and to the fetus in utero.<sup>69</sup> The number of persons infected with HIV who will ultimately develop AIDS is not yet known with certainty, but it is at least 3 in 10--possibly as many as 10 in 10.

The period between initial exposure to HIV and development of full AIDS averages seven or eight years.<sup>70</sup> This long latency period has permitted the

rapid, unknowing spread of the virus within groups of intravenous drug users. The situation is especially bad in New York City, where there are both large numbers of cases of AIDS and high seroprevalence rates (a high percentage already infected) among intravenous drug users. By mid-1987 a third of the city's 10,000 AIDS cases were drug addicts; in nearby New Jersey and Connecticut, more than half of all diagnosed AIDS cases were addicts, their sex partners, or children. Nationwide, nearly a quarter million intravenous drug users may already be infected.<sup>71</sup>

It is difficult to say what the long-term effect of AIDS on narcotic addiction will be because developments in AIDS are occurring very rapidly, both in the spread of the epidemic and in research on ways of potentially controlling or treating it. Nevertheless, several studies on the reactions of intravenous drug users to AIDS show that the epidemic has had an effect and hint at the possibility of reducing the practice of illicit drug injection, or at least of making it more circumspect. Death has always been common among intravenous drug users, but AIDS forces a radically different psychology of death in the group. Involving a protracted and painful death, often with stigmatization and social isolation, AIDS conjures up none of the escapist fantasies associated with overdose deaths. The virus may also develop long after a person has ceased injecting drugs; one cannot be certain that stopping drugs will prevent the development of AIDS. Finally, there is the possibility of infecting friends and family, through sexual or in utero transmissions of the virus. These considerations have apparently prompted changes in the behavior of intravenous drug users in the New York area, where addicts have increased their use of sterile needles and reduced the number of persons with whom they will share drug injection equipment.<sup>72</sup> It is possible that "safer" needle use will become the norm for intravenous narcotic addiction in the future. Fear and natural selection are both operating in that direction.

Another potential for change in narcotic addiction may be in the recruitment of new intravenous drug

users. Novices usually learn to mainline through contact with experienced users whom they admire and depend on for the equipment for their first injection.<sup>73</sup> Over time, the fear of AIDS is likely to reduce both the admiration felt for experienced intravenous users and the willingness to borrow or experiment with their needles and syringes. No one wants to borrow death, especially death by AIDS.

The threat of AIDS could reduce illicit drug injection to the point where not enough new persons are recruited to replace those intravenous users who die or quit. This would not necessarily eliminate narcotic addiction, however. It would still be possible to become addicted by sniffing or (more rarely) smoking heroin, or by the regular use of a synthetic opiate. Thus, even if AIDS should virtually eliminate intravenous drug addiction, there is no guarantee that other forms of addiction will disappear. They may even expand, as has happened with cocaine smoking.

One last point about AIDS: although there is some evidence that intravenous drug users are motivated by fear of the disease to seek treatment,<sup>74</sup> most addicts remain at large, as noted earlier. The danger they pose to themselves and to others underscores the fact that a large percentage of users remain outside of treatment programs. Any modality, whether geared toward maintenance, short-term detoxification, or long-term abstinence, is safer than street trafficking and use--especially if the patients do not "cheat" on the program.

Of course, patients could not cheat if street drugs were unavailable. That was a point Anslinger made repeatedly: get the addicts clean through institutional treatment and then keep them from temptation by drying up the illicit supply. Unfortunately, the strategy did not work particularly well for him, nor did it work at all well during the 1980s. Retail (street-level) drug transactions have exceeded \$100 billion, up from an estimated \$79 billion in 1980. Heroin imports, which generated \$8 billion in 1980, grew 50 percent by 1986, from four to six metric tons per annum. Heroin purity levels were low in the early

1980s, in the 3 to 5 percent range, but they have sharply increased, owing to an influx of "China White," Mexican "black tar," and other highly potent varieties. Much of the Mexican heroin is smuggled by illegal aliens, whose chances of being caught crossing the border are as low as one in five.<sup>75</sup>

Nor is Mexico the only source of the problem. Large amounts of heroin are also shipped from Southeast Asia, a region that became a major source of supply during the Vietnam era. A third source of supply, Southwest Asian heroin, emerged in the late 1970s and expanded rapidly during the early 1980s, in the wake of political and military turmoil in the region. The one signal law enforcement accomplishment, the disruption of the famous "French connection" in the early 1970s, proved to be a transitory victory. Turkish opium processed into heroin at Marseilles, the single most important illicit source for most of the classic era, became very scarce in the U.S. after 1973; this was of little strategic significance, however, because the combined Mexican, Southeast Asian, and Southwest Asian supplies have more than made up for the deficit.<sup>76</sup>

The failure to stop the heroin traffic was by no means the only or even the worst setback for law enforcement since 1965. Officials have also had to contend with the emergence of several new street drugs, such as LSD and PCP; the diversion and abuse of licit drugs, such as Methedrine and methaqualone; and the increased popularity of illicit nonopiate drugs, such as marijuana and cocaine. Simply stated, more people from more different backgrounds have begun using more drugs.

This became apparent during the 1960s and early 1970s, as marijuana smoking spread rapidly among those whom sociologist Eric Goode described as "the growing edge of American social life." These were the baby boomers, then entering their late teens and early twenties, the prime drug-experimenting years.<sup>77</sup> "Probably the most affluent, confident, indulged crop in human history," Timothy Leary called them, "[this]

generation of young Americans threw caution to the winds and recklessly rejected the fear-imposed systems that have kept human society surviving--the work ethic, male domination, life-style conformity, inhibition of sensuality and self-indulgence, reliance on authority."<sup>78</sup> Leary's generalization was only half-correct: most of the pot-smoking students graduated, trimmed their hair, and went to work for hierarchical enterprises, motivated by "fear" of an empty checking account. Despite their economic assimilation, however, they retained many of the hedonic, antiauthoritarian values of their youth, including tolerance of marijuana and other drugs.

The speed with which marijuana use and trafficking expanded was remarkable. In one state, California, marijuana arrests rose from 7,560 in 1964 to 50,327 in 1968. Nationwide, federal seizures of marijuana increased more than 10-fold between 1969 and 1973, hashish seizures more than 20-fold. By 1979 an estimated 50 million Americans had tried marijuana at least once, including two-thirds of all young adults. Marijuana use has declined somewhat during the 1980s, but it remains a popular illicit drug and a source of huge profits for both international traffickers and, increasingly, domestic cultivators.<sup>79</sup>

Equally remarkable was marijuana's popularity among high school and junior high school students. Peter Santangelo, a former undercover narcotic agent who worked in southern Connecticut in the early 1970s, was struck by the youth of those who bought and sold marijuana and other drugs. "Teens, early teens, seventeen, eighteen; dungarees; long hair, never brushed, dirty; parents well-to-do," was the way he characterized his quarry.<sup>80</sup> Nationwide, the number of 12- to 17-year-olds who had ever tried marijuana rose from virtually zero in 1960 to three out of ten in 1979.<sup>81</sup>

This was a portentous development, not only because the young marijuana smokers might "burn out" with daily use but because they were also more likely to experiment with other illicit substances. Marijuana, like tobacco and alcohol,

was a gateway drug. A pattern emerged: first beer or wine, then tobacco or hard liquor, then marijuana, then another illegal drug, like LSD or cocaine.<sup>82</sup> Some progressed all the way to the opiates, thereby contributing to the heroin epidemic of the early 1970s, but they were exceptional. Most marijuana smokers, if they went on to other drugs, chose pills, hallucinogens, or stimulants.<sup>83</sup> It was in the ghetto that the ultimate graduation to heroin was still most likely to occur. Epidemiological studies continued to show that minorities, especially black and Hispanic males, were heavily overrepresented among narcotic users.<sup>84</sup> What happened after 1965, in short, was the superimposition of a new pattern of largely recreational, largely youthful, largely white, and largely nonopiate drug use on the existing pattern of inner-city narcotic use and addiction.

A partial exception to this generalization is cocaine, a crossover drug that has experienced a renaissance among both white and minority users. Popular around the turn of the century, cocaine fell into disuse during the classic era. "Cocaine addiction has disappeared," Anslinger flatly declared.<sup>85</sup> The drug still had a few devotees, mainly individuals who were privileged, or socially marginal, or both. Among them were jazz musicians, stage and screen stars, pimps, prostitutes, and bohemians. But if federal seizures were any indication, cocaine was a remote second to heroin and other opiates. As late as 1970 only 478 pounds of the drug were confiscated nationwide.<sup>86</sup>

Today cocaine seizures are measured by the ton. Virtually all indicators of use--admissions to treatment programs, overdose deaths, student surveys, and chemical analyses of urine samples--have shown a marked increase in its consumption. By 1985 an estimated 40 percent of graduating high school seniors had tried the drug at least once. Illicit sales are so vast that the transportation and processing of money have become as difficult for cocaine traffickers as smuggling the drug itself. One dealer went to the point of removing the play money from several

Monopoly games, replacing it with real money, sealing the boxes back up, and then shipping them to Colombia. A portion of such fabulous profits is naturally plowed back into production. Between 1982 and 1986 the world's supply of cocaine was roughly doubled by the planting of new coca bushes in South America, and it has continued to expand since then.<sup>87</sup>

One of the many groups to become involved in the cocaine revival of the 1970s was, ironically, methadone patients. At a sufficiently high dosage, methadone blocked the euphoric effects of heroin; that was one of its selling points. Methadone did not, however, necessarily blot out the desire to get high, and many patients soon discovered that nonopiate drugs, including cocaine, would do the trick. "Methadone . . . takes care of my heroin problem," explained one 42-year-old addict. "But I still need something, so I'm using coke. I'm shooting it." He financed his purchases with his welfare check and, when that was insufficient, by breaking into cars.<sup>88</sup> Others raised money by selling part of their methadone on the street. Proponents of methadone maintenance were caught in a political bind. Not only was methadone pharmacologically irrelevant to the growing number of nonopiate users, it appeared (erroneously) that the programs were responsible for financing their indulgence. "The television stations in particular never tired of arranging an arrest with a local police department," Robert Newman complained. "An undercover agent would go up to one of the patients in front of a clinic, offer usually twice the going rate for illicit methadone, get as many people as they wanted to sell, while all this was filmed by a clandestine TV camera."<sup>89</sup>

In reality, methadone patients made up only a fraction of the new cocaine users. Several other forces were also at work. One of them was the waning popularity and availability of amphetamines. "*Contra speedamos ex cathedra*," pronounced Allen Ginsberg, a warning seconded by various counterculture notables. Speed killed. It also incarcerated, with the advent of stricter production regulations. Fear and short supplies of

amphetamines made cocaine attractive as a "safe" alternative stimulant--at least until 1986, when the death of college basketball star Len Bias made it abundantly clear that cocaine could also kill.<sup>90</sup>

The highly publicized troubles that black athletes and celebrities had with cocaine were, in one sense, misleading. Because the Willie Nelsons and Richard Pryors of the world had huge amounts of disposable income and worked in high-pressure occupations, their cocaine consumption fit into what might be thought of as the traditional show-business pattern. What was different about the 1970s and 1980s was the spread of cocaine beyond these rarefied circles to the middle and professional classes, notably among baby boomers who had gone to college, flirted with the counterculture, smoked marijuana, and learned to discount official warnings about drug abuse. They also had the money and the disposition to become users, albeit on a lesser scale than the superstars. After 1982, when a glut of South American cocaine dropped wholesale prices by a third or more, those of modest means could partake.<sup>91</sup> With vials of "crack" (potent, smokable cocaine) retailing for as low as \$5, no one was priced out of the market. By the late 1980s, crack had supplanted heroin as the drug of choice in the nation's ghettos.

Crack caught on because it was easy to smoke, requiring no complicated preparations with dangerous chemicals, as had been the case with "free basing." Crack delivered the rush of intravenous injection without the risk of AIDS and other infections. A few users have experimented with smoking crack and heroin, a combination likened to "firing both barrels at the brain's pleasure centers."<sup>92</sup> Two barrels or one, this method is likely to produce dependence because the powerful doses soon disrupt the brain's chemistry, creating a depressed, anhedonic state that can only be overcome by more and more cocaine. Some users have also been drawn into a secondary dependency on tranquilizers and depressants, such as diazepam and barbiturates, which they take to combat the hyperstimulation and nervousness resulting from the cocaine.<sup>93</sup>

Awareness of its addictive potential, together with concern over its relation to street crime, has hardened public attitudes toward the drug and altered the tone of press coverage.<sup>94</sup> Since 1965, cocaine has gone from complete obscurity to Public Enemy Number One.

Like many historical changes, the altered pattern of use has left linguistic traces. Prior to the 1960s government officials, when describing their task, spoke unselfconsciously of combating the narcotic traffic. This was technically inaccurate--cocaine and marijuana were not narcotics--but it made practical sense because most of their arrests and the bulk of their seizures involved opiates. Since then, however, the word "narcotic" has been replaced by the more general term "drug," as in drug problem, or the still more capacious adjective "substance," as in substance abuse. This change was forced by the growing prominence of marijuana and cocaine, as well as the development of novel practices like glue sniffing or eating hallucinogenic plants and mushrooms. It made no sense, pharmacologically or otherwise, to lump these things together as "narcotic use," let alone "narcotic addiction." Some researchers sought to expand the concept of addiction itself when they saw that dependence could develop with nonopiate drugs. "We should define addiction in terms of the compulsion to take the drug rather than whether it causes withdrawal," Dr. Michael Bozarth explains. "In this sense, cocaine is at least as addictive as heroin."<sup>95</sup>

Or, one might say, as addictive as alcohol. Even as new patterns of nonopiate dependence were emerging, there was distressing evidence that the nation's oldest psychoactive nemesis was strengthening its grip on the population. Per capita consumption of alcohol rose steadily, from 2.1 gallons per capita in the early 1960s to 2.8 gallons in the late 1970s. One 1977 poll revealed that seven out of ten Americans drank, and that nearly one in five considered liquor the cause of trouble within their families. Although health concerns and adverse publicity have reduced alcohol consumption somewhat during the 1980s,

it is still higher than at any time during 1920-1965.<sup>96</sup>

The pattern of American drinking has changed as well. In the 1940s and 1950s, the most numerous imbibers by far were the straight drinkers, people who regarded any substance other than alcohol (or tobacco) as beyond the pale. "Our national drug is alcohol," wrote William Burroughs in 1956. "We tend to regard the use of any other drug with special horror."<sup>97</sup> Ambivalence or outright hostility toward drug users persisted among straight drinkers after 1965. The reverse did not apply, however. Those who took drugs had no strong feelings against alcohol, tobacco, or other licit substances. On the contrary, they used them frequently. Some psychedelic enthusiasts of the 1960s preached that alcohol was a downer and that the faithful should renounce it, but they were disappointed by the response to their exhortations. The baby boomers were, so to speak, polypharmaceutically perverse. They cheerfully experimented with a range of illicit drugs while they drank alcohol and puffed cigarettes with their conventional elders. Linkages began to develop between their dependencies. Among recovering cocaine addicts, for example, drinking is one of the most common causes of relapse. Alcohol loosens their inhibitions; it also reminds them of their previous cocaine use, which often took place in a bar or other surroundings in which drink was present. The memory triggers a sudden overwhelming longing, and they resume use of the drug.<sup>98</sup>

If the complex and shifting pattern of multiple drug use forced government officials to change the language they used to describe the problem, the same was true of treatment providers. The 1980s were marked by the emergence of "chemical dependency" treatment centers, many of them associated with private hospitals. These programs did not sharply differentiate between drug and alcohol abusers, as had been the rule in the past. Rather, they treated conventional alcoholics, drug abusers, and patients who manifested symptoms of both disorders. (Cocaine and alcohol were the most important combination.) Most patients

treated in chemical dependency units were middle-class workers or their spouses and children who could finance their stays with employer-provided insurance benefits. Unemployed or self-employed workers of modest means, by contrast, had access only to publicly financed programs, which were becoming progressively more overcrowded and understaffed as the decade wore on.

The simultaneous, sustained increases in several types of drug abuse and the consequent growth in the number of addicted persons requiring treatment raise some important questions, particularly about law enforcement strategies. Why were the police and customs agents collectively unable to contain the importation and use of illicit drugs after 1965? Why did substances once comparatively rare become increasingly common? Why, despite larger budgets, expanded personnel, and more arrests, did the responsible agencies utterly fail to stop the influx of drugs?

The short answer is money. There was, in the first place, a great deal of money to be made from American users. It was not just that there were large numbers of adolescents in the 1960s and 1970s who were willing to experiment with drugs; it was that they had the wherewithal to do so. "I mean, these kids would say, 'Dad, I need fifty dollars so I can buy a tire,' or something," Agent Santangelo observed. "And Dad would give them fifty dollars."<sup>99</sup> Not all of the money went to the B.F. Goodrich Company. When these same youth graduated and became financially independent, they had more discretionary dollars at their disposal and could afford more expensive drugs in larger quantities. Gradually, a new stereotype, the white-collar professional squandering his salary on cocaine, emerged and joined that of the street addict who stole to support his habit. The traffickers were indifferent to whether American customers financed their use through work or theft; what mattered was that the money, or the fenceable merchandise, was there. The United States and, secondarily, Western Europe were the most logical targets for drug wholesalers because they were affluent, consumer societies, long on currency and short on moral strictures.<sup>100</sup> They

were the perfect markets, and drugs were the perfect products because they could create and sustain their own demand.

The huge profits to be made in the United States not only provided incentives to drug wholesalers but also bought protection for the traffickers through the familiar expedient of bribery. The extent of the corruption became clear in the early 1970s, when Detective Frank Serpico started talking to reporter David Durk of the *New York Times*. Durk's articles led to the formation of an investigative commission headed by Whitman Knapp. The Knapp Commission's 1973 *Report on Police Corruption*, which highlighted problems with narcotic enforcement, made headlines for months. Its revelations, however, seem minor in comparison to what was subsequently learned about graft at the other end of the drug pipeline. Theoretically, it is much easier to choke off the commerce at its point of origin, before the drugs are concealed, shipped, and dispersed. Yet it is in those countries where drugs are grown and processed that corruption is most deeply entrenched. The bribes are actually calibrated: \$10 a kilo for marijuana smuggled across the border at Tijuana, for example, with the local police commander earning upwards of \$150,000 a week. Not only do Mexican authorities look the other way, they provide armed escort service for major shipments. They have also been known to torture, possibly to kill, interloping American narcotic agents. Some trafficking organizations, like the Shan United Army, which operates along the Burma-Thailand border, are so large and well armed that they do not need to infiltrate governments; they are themselves autonomous political entities. Worldwide, the illicit narcotic industry has revenues estimated by some at a half-trillion dollars a year; it is easy and expedient to divert a fraction of the cash flow to protecting exports. Anyone who can stock Monopoly games with real money can afford a few strategically placed government officials. It is simply a matter of rationalizing risk.<sup>101</sup>

The problems of enforcement in the drug-producing countries are compounded by the

global economic and political situation. Many of these nations are poor and, like Mexico, burdened by international debts. Drugs are a vital source of revenue, not only for their governments, but for the peasants who can earn more by cultivating poppies, coca, or marijuana than by producing licit commodities. In Bolivia, for example, lawful exports now produce only a fraction of the revenue brought in by cocaine, which is responsible for half of the country's gross national product.<sup>102</sup>

Despite their growing dependence on drug trafficking, Bolivia and other Latin American countries were widely supposed by U.S. officials to be targets of Communist subversion during the 1980s. This created a conflict of interest: the State Department and the CIA sometimes wished to protect, for their own geopolitical reasons, the same governments that the Drug Enforcement Administration suspected of complicity in smuggling. The 1989 ouster of Panama's General Manuel Antonio Noriega is the exception that proves the rule. Information implicating Noriega in drug trafficking has been available since 1972. For years this information was simply ignored. The CIA has gone so far as to treat major traffickers as national security "assets," using their organizations for gun-running and counterinsurgency operations.<sup>103</sup> Foreign policy and antinarcotic efforts were occasionally at cross-purposes during Anslinger's era,<sup>104</sup> but on the whole he was successful at keeping the two in alignment. This is no longer the case. Domestic demand, unreal profits, systematic corruption, economic dependency, inconsistent diplomacy--for all of these reasons the interdiction strategy has had difficulty stanching the flow of drugs into the country.

The sense that illicit drug trafficking and use were out of control led to the present war on drugs. The formal declaration came on August 4, 1986. President Ronald Reagan delivered a major speech "not to announce another short-term government offensive but to call instead for a national crusade against drugs--a sustained, relentless effort to rid America of this scourge--by mobilizing every segment of society against drug abuse." He called

for the elimination of all drugs from workplaces and schools; voluntary (or, for key government personnel, mandatory) drug testing; improved treatment and rehabilitation programs; greater public intolerance of drug abuse; and stepped-up enforcement against domestic and international traffickers. In remarks to Republican congressmen before the address, Reagan set as his overall goal a 50 percent reduction in drug use and promised that his escalating war would mean "Pearl Harbor for the drug traffickers."

A little more than a month later, on September 14, 1986, the President made a nationally televised address, accompanied by First Lady Nancy Reagan. Again Reagan relied on martial metaphors, drawn from World War II. Americans would have to swing into action, he explained, the way they did in the 1940s, when men and women rolled up their sleeves, built tanks and planes, and planted victory gardens. "We're in another war for our freedom, and it's time for all of us to pull together again," he said. The First Lady was equally adamant. This was a total war, a war in which there could be no middle ground. Do not use drugs, and do not tolerate those who do. Firm, private refusals would create an "outspoken intolerance for drug use" and would influence by example young people who might otherwise experiment with drugs.<sup>105</sup>

There is some truth in this insight. Peer disapproval is more powerful than remote, impersonal laws; the host or hostess who says no is more effective than the prosecutor downtown. The difficulty lies in engineering such a massive change of attitudes and behavior, particularly among young adults accustomed to and tolerant of drug use. Many legislators, although willing to fund educational programs toward that end, have also resurrected the Anslingerian tactic of stiffer penalties for dealers, up to and including execution. The death penalty was, in fact, the most widely discussed aspect of the 1986 omnibus antidrug bill. Although capital punishment for major traffickers convicted of murder (a transparently political provision favored by House members up for reelection) was blocked by the

Senate, the bill that did pass nevertheless specified longer prison sentences for those who recruited juveniles to sell drugs or those who sold drugs near schools. The law also authorized \$1.7 billion in additional expenditures, with most of the money to go for law enforcement and drug education.<sup>106</sup> Two years later, just before the 1988 general election, Congress passed a second omnibus bill. This time a capital punishment provision was included, as well as substantial new civil penalties for personal use and possession. The get-tough tone has continued into the Bush administration: the White House's 1989 *National Drug Control Strategy* was unapologetically martial in tone and stressed the need to win back the streets from users and dealers. The pendulum seems to be swinging back to the 1950s; we may be entering a "neoclassic" era of drug control.

Is this a wise departure? Or, to put it another way, was the medicalization of the narcotic problem, the legitimatization of a hybrid approach in the 1960s and 1970s, a bad idea? Would the country have been better off if Anslinger had not retired, if he and his successors had been permitted to maintain an unwavering hard line?

The answer is almost certainly no. Although it may be true that superimposing a clinical treatment model on a criminal justice base signaled official ambivalence to the public, it is doubtful that this produced many new users. There is one school that argues just the opposite, that criminalization inevitably glamorizes a drug.<sup>107</sup> The use of LSD, for example, peaked five years after it was made illegal; a few thousand users in 1966 swelled to an estimated 5 million by 1971.<sup>108</sup> This does not prove that criminalization caused increased use--that would be *post hoc, ergo propter hoc* reasoning--but it does suggest that the laws made little concrete difference.

The point can be generalized. Drug policy is best understood as a congeries of a society's history, values, and prejudices. It is not, in and of itself, the key variable governing the extent of drug use at a given point in time. Prevalence is more likely to be determined by outside events. These include

wars, epidemics, population shifts, new technologies and pharmaceutical discoveries, physician behavior, economic conditions, media coverage, and changes in moral attitudes and religious beliefs. It should be remembered that Anslinger was head of the Bureau of Narcotics at a time when Americans were firmly opposed to narcotic use, when the press acted as his clique, smugglers lacked high-powered racing boats and Lear jets, and LSD, DMT, PCP, and other acronymic drugs were as yet unfamiliar to the public. These were far greater advantages than the Boggs Act. When circumstances changed, when the antinarcotic consensus eroded, the underclass grew and festered, new drugs became fashionable on campus, and hundreds of thousands of American troops were sent to fight in opium-rich Southeast Asia, then the scope of the problem was bound to widen. One factor alone, the coming of age of the nearly 80 million Americans born between 1946 and 1965, ensured an upsurge in drug use; in epidemiological terms, there was an unusually large number of susceptibles in the population immediately after the classic era.

Although government policy does not solely determine the prevalence of drug use, it does affect the health and behavior of the users themselves. The most important impact of punitive drug laws is on consumers, especially those who are addicts. Their hustling activities, patterns of association, routes of administration, risks of illness, and prison histories have all been shaped by the prohibition policy and its corollary, the black market. Mainlining, for example, was unknown before 1915, when addicts did not have to purchase adulterated narcotics. It is true that the preaddiction characteristics of users took a turn for the worse during the early twentieth century and that numerous addicts would have led difficult, unhealthful, and crime-filled lives with or without the assistance of the Bureau of Narcotics. The point is that their troubles, and those of the people they victimized, were exacerbated by legal strictures. Policy analyst Mark Kleiman has called this exacerbating tendency the paradox of vice control:

## NOTES

*We make something illegal because it's a vice--bad for its devotees and bad for people around them. But for those who indulge anyway, prohibition and enforcement make the vice more dangerous; they also make these people more dangerous to the rest of us. Think of wood alcohol during Prohibition, the violence and disease associated with prostitution, the gambling debts collected by muscle rather than collection agencies.*

*That this paradox exists does not mean we should legalize everything--it seems to me that society is better off with 400,000 very dangerous heroin addicts obtaining the drug illegally than with 5 million addicts obtaining the drug from their doctors, even though each of them would be a little better off and a little less dangerous. It does mean that we don't get a free shot at drug dealing.<sup>109</sup>*

Anslinger understood that his shot (or, more accurately, cannonade) at all types of drug dealing ultimately had to be based on some sort of least-misery-for-the-least-number rationale. That was why he continued to rail at the narcotic clinics and "dope doctors" long after they had been suppressed; they were the floodgates that must remain closed lest the country become awash with narcotics. For three decades he managed to convince the government and the public of the correctness of his utilitarian calculation, thereby maintaining "a policy of narcotics control unlike that of almost every nation in the world."<sup>110</sup> It was, nevertheless, a case built on bluff and intimidation. There is no objective evidence to support the idea that disallowal of maintenance saved the country from a series of mid-century narcotic epidemics.<sup>111</sup> If the narcotic clinics had not been closed back in 1919-1920, if medical discretion and supervision had been permitted within the context of detoxification-or-maintenance programs, and if this approach had been widely emulated, then incalculable suffering, crime, and death could have been averted. Those who contemplate a purely preventative strategy for the future, who trust only in education and legal pressure, would do well to contemplate the implications of this. The combined medical-police approach, with all its contradictions and weaknesses, is by default the best policy available. The tragedy is that the country did not recognize this 40 years sooner.

<sup>1</sup>Many of the interviews noted in this paper appear in edited form in David Courtwright, Herman Joseph, and Don Des Jarlais, *Addicts Who Survived: An Oral History of Narcotic Use in America, 1923-1965* (Knoxville: University of Tennessee Press, 1989). Most of the material in this essay also appears in the introduction and epilogue of *Addicts Who Survived*.

<sup>2</sup>For a review of the statistical evidence on late nineteenth- and early twentieth-century addiction, see Chap. 1 of David T. Courtwright, *Dark Paradise: Opiate Addiction in America Before 1940* (Cambridge, Mass.: Harvard University Press, 1982).

<sup>3</sup>Address delivered at Syracuse, New York; copy forwarded to Katharine Bement Davis, November 22, 1924, Papers of the Bureau of Social Hygiene, Series 3, Box 3, Folder 126, Rockefeller Archive Center, North Tarrytown, N.Y.

<sup>4</sup>Richard J. Bonnie and Charles H. Whitebread II, *The Marijuana Conviction: A History of Marijuana Prohibition in the United States* (Charlottesville: University Press of Virginia, 1974), 26-27.

<sup>5</sup>The correspondence and questionnaires that Wright assembled before making these estimates may be found in the Records of the United States Delegation to the International Opium Commission and Conference, 1909-1913, Record Group 43, National Archives, Washington, D.C.

<sup>6</sup>The purpose of the tax was less to raise revenue than to justify the constitutionality of the bill by making it seem an expression of the congressional taxing power in Article I, Section 8, of the Constitution. This was one of two standard gambits, the other being an evocation of the commerce clause. Those who drafted major social and economic reform legislation could be almost certain of constitutional challenges, and the Supreme Court had a reputation for frequently voiding such laws, at least prior to the "constitutional revolution" of 1937.

<sup>7</sup>Bonnie and Whitebread, *The Marijuana Conviction*, 28. "A Chemist" published the following letter in the *St. Louis Star-Times* of February 4, 1935: ". . .

Marijuana, cocaine, morphine, heroin, opium, all alcoholic beverages and five other drugs are habit forming and known by all expert chemists. I think the best cure is to let dopers have all they want and get rid of them."

<sup>8</sup>249 U.S. 90; *Transcript of Record . . . The United States of America . . . vs. C.T. Doremus* (filed 1918), 2.

<sup>9</sup>249 U.S. 98; *W.S. Webb and Jacob Goldbaum v. The United States of America . . . Brief on Behalf of the United States*, 34-35. The choice of metaphor is interesting and reveals the extent to which the stereotypes of the addict and the alcoholic had become intertwined by 1918.

<sup>10</sup>268 U.S. 5. For a discussion of *Doremus*, *Webb*, *Linder*, and related cases, see Rufus King, *The Drug Hang-Up: America's Fifty-Year Folly* (Springfield, Ill.: Charles C. Thomas, 1972), 40-46. King argues that the government deliberately selected the most blatant and unsavory cases of "scrip doctors," thereby enhancing its chances of securing anti-maintenance precedents. A reading of the government briefs in *Doremus* and *Webb* reveals a complementary strategy: statistical manipulation. Both documents assert that Congress was wrestling with a massive social problem, involving as many as 1.5 million addicts, concentrated in urban and industrial areas. These figures were frightening; they were also fabricated. One is struck by the fact that, at virtually every crucial juncture in the evolution of narcotic policy between 1909 and 1919, the key legislative and judicial decision makers had to rely on distorted and exaggerated figures. Addiction was understood as not merely bad but malignant, threatening to engulf the entire nation. This belief made restrictive measures seem necessary, despite doubts about their constitutionality. Finally, there was at the time of these rulings still widespread optimism that addicts could be cured and remain abstinent, especially if their supplies of drugs were cut off and they were left without an alternative. These assumptions were subsequently proved to be naive, but in historical terms they were nevertheless important to the passage and interpretation of the Harrison Act. See Chap. 4 of David F. Musto, *The American Disease: Origins of Narcotic Control* (New Haven, Conn.: Yale University Press, 1973).

<sup>11</sup>The Shreveport closure was bracketed by two other noteworthy legal developments. In 1922 Congress passed the Narcotic Drugs Import and Export Act,

placing further restrictions on the international narcotic trade and strengthening provisions against unauthorized possession; in 1924 it outlawed heroin altogether. In both practical and symbolic terms, however, it was the elimination of organized maintenance in 1923 that most clearly demarcated the classic period of narcotic control. The 1922 and 1924 statutes were essentially refinements or expansions of the established policy of forbidding certain drugs to nonmedical users.

<sup>12</sup>It is now clear that Prohibition actually reduced the per capita consumption of alcohol, perhaps by as much as 50 percent. See Paul Aaron and David Musto, "Temperance and Prohibition in America: A Historical Overview," in Mark H. Moore and Dean R. Gerstein, eds., *Alcohol and Public Policy: Beyond the Shadow of Prohibition* (Washington, D.C.: National Academy Press, 1981), 164-166. However, as Aaron and Musto point out, this was not necessarily the perception of contemporaries. Repeal advocates conducted a skillful campaign of mystification; in 1932 no less a public figure than Franklin Roosevelt declared that "instead of restricting, we have extended the spread of intemperance" (*The Public Papers and Addresses of Franklin D. Roosevelt*, Samuel I. Rosenman, comp., Vol. 1 [New York: Random House, 1938], 685). This myth is still widely entertained by Americans. On the official line that strict enforcement reduced nonmedical addiction after 1921 and the problems with this claim, see Chap. 5 of Courtwright, *Dark Paradise*.

<sup>13</sup>Quoted in Larry Engelmann, *Intemperance: The Lost War Against Liquor* (New York: Free Press, 1979), 199.

<sup>14</sup>*The Public Papers and Addresses of Franklin D. Roosevelt*, 1, 653.

<sup>15</sup>See, for example, Bonnie and Whitebread, *The Marijuana Conviction*, 19; Edward H. Williams, "The Drug-Habit Menace in the South," *Medical Record*, 85 (1914), 247-249. Musto, in the 1973 edition of *The American Disease* (61, 65-68), makes the interesting point that most of the key sponsors of the Harrison Act were drinkers or opposed to alcohol prohibition, or both. Some public figures, however, remained consistent in their opposition to both drink and drugs, for example, Richmond P. Hobson and William Jennings Bryan. Generally speaking, only evangelical

Protestants opposed both after the 1920s; most other Americans accepted moderate drinking (and tobacco smoking) but were vehemently opposed to narcotic use.

<sup>16</sup>"Anslinger, H(arry) J(acob)," *Current Biography, Ninth Annual Compilation--1948* (New York: H.W. Wilson, 1949), 20-22; John Finlator, *The Drugged Nation: A "Narc's" Story* (New York: Simon and Schuster, 1973), 69-73; interview with Howard Diller in Larry Sloman, *Reefer Madness: The History of Marijuana in America* (Indianapolis: Bobbs-Merrill, 1979), 194-198; Harry Anslinger and Kenneth W. Chapman, "Narcotic Addiction," *Modern Medicine* 25 (1957), 182; H.J. Anslinger and William F. Tompkins, *The Traffic in Narcotics* (New York: Funk and Wagnalls, 1953), 241. The fullest and most balanced biographical treatment is John Caldwell McWilliams, "The Protectors: Harry J. Anslinger and the Federal Bureau of Narcotics, 1930-1962" (Ph.D. diss., Pennsylvania State University, 1986).

<sup>17</sup>"Harry J. Anslinger Dies at 83; Hard-Hitting Foe of Narcotics," *New York Times*, November 18, 1975, p. 40; Anslinger and Chapman, "Narcotic Addiction," 183, 189.

<sup>18</sup>"Anslinger, H(arry) J(acob)," 21; Douglas Clark Kinder, "Bureaucratic Cold Warrior: Harry J. Anslinger and Illicit Narcotics Traffic," *Pacific Historical Review* 50 (1981), 169-191; Douglas Clark Kinder and William O. Walker, "Stable Force in a Storm: Harry J. Anslinger and United States Narcotic Foreign Policy, 1930-1962," *Journal of American History* 72 (1986), 908-927.

<sup>19</sup>One physician who took this stance was Charles Terry. His story is told in David T. Courtwright, "Charles Terry, *The Opium Problem*, and American Narcotic Policy," *Journal of Drug Issues* 16 (1984), 421-434.

<sup>20</sup>Anslinger himself accepted Kolb's view on the psychopathic makeup of nonmedical addicts and made use of his findings that users were generally criminals before becoming addicted. Anslinger's predecessor, Levi Nutt, also declared that addicts were "mentally deficient or psychopathic characters" who needed to be taken off the streets and placed in institutions, thereby destroying the demand for smuggled drugs. Thus, there was theoretical and practical continuity at the highest levels from the 1920s through the 1930s and beyond. Or, as H. Wayne Morgan puts it, "by the time

Anslinger headed the federal antinarcotic effort in 1930, the patterns of law enforcement were well set. He merely made them more efficient." Morgan, *Drugs in America, 1800-1980: A Social History* (Syracuse, N.Y.: Syracuse University Press, 1981), 124. See also Anslinger and Tompkins, *Traffic in Narcotics*, 223, 268, and Courtwright, *Dark Paradise*, 141-145.

<sup>21</sup>Robert W. Rasor, "The United States Public Health Service and Institutional Service Program for Narcotic Addicts at Lexington, Kentucky," in Leon Brill and Louis Lieberman, eds., *Major Modalities in the Treatment of Drug Abuse* (New York: Behavioral Publications, 1972), 2-6.

<sup>22</sup>Anslinger and Chapman, "Narcotic Addiction," 175, 187, 191. See also Stanley Meisler, "Federal Narcotic Czar," *The Nation* 190 (February 20, 1960), 159; Morgan, *Drugs in America*, 134-135.

<sup>23</sup>Gary Silver and Michael Aldrich have assembled a large number of sensational feature stories, editorial cartoons, and the like in *The Dope Chronicles: 1850-1950* (San Francisco: Harper and Row, 1979). Many of these come from the Hearst papers. The Hearst cartoons are of particular interest, not only as vivid illustrations of how the hard-line narcotic policy was reinforced by mass media but because they sharply differentiated between drug and alcohol prohibition, upholding the former and condemning the latter. The comic strips of the Prohibition era also generally portrayed alcohol in a neutral or slightly favorable way. See Sylvia Lambert, "The Social History of Alcohol as Portrayed in the Comics up to the End of the Prohibition Era," *Journal of Drug Issues* 16 (1986), 585-608.

<sup>24</sup>Patti Iiyama, Setsuko Matsunaga Nishi, and Bruce D. Johnson, *Drug Use and Abuse among U.S. Minorities: An Annotated Bibliography* (New York: Praeger, 1976), 16-17.

<sup>25</sup>John C. Ball and Carl D. Chambers, eds., *The Epidemiology of Opiate Addiction in the United States* (Springfield, Ill.: Charles C. Thomas, 1970), 312-315. Note that the 1966 percentages include addicts in both the Lexington and Fort Worth hospitals.

<sup>26</sup>Iiyama et al., *Drug Use and Abuse*, 6.

<sup>27</sup>Claude Brown, *Manchild in the Promised Land* (New York: Macmillan, 1965), 99. See also pp. 179-191.

<sup>28</sup>Richard B. Sherman, ed., *The Negro and the City* (Englewood Cliffs, N.J.: Prentice-Hall, 1970), 14; Mabel M. Smythe, ed., *The Black American Reference Book* (Englewood Cliffs, N.J.: Prentice-Hall, 1976), 178-179; Bureau of the Census, *State and Metropolitan Area Data Book, 1982: A Statistical Abstract Supplement* (Washington, D.C.: U.S. Government Printing Office, 1982), 201; Karl E. and Alma F. Taeuber, *Negroes in Cities: Residential Segregation and Neighborhood Change* (Chicago: Aldine, 1965), 1.

<sup>29</sup>Thomas C. Holt, "Afro-Americans," *The Harvard Encyclopedia of American Ethnic Groups* (Cambridge, Mass.: Belknap Press of Harvard University Press, 1980), 15; Brown, *Manchild*, 7-8.

<sup>30</sup>See Sylvester Leahy, "Some Observations on Heroin Habitués," *Psychiatric Bulletin of the New York State Hospitals*, n. s. 8 (1915), 260, on the propensity of white immigrant children to become involved with narcotics.

<sup>31</sup>Alan A. Block, "The Snowman Cometh: Coke in Progressive New York," *Criminology* 17 (1979), 75-79, describes the Bureau of Social Morals. The most important black organization to campaign against narcotics was the Nation of Islam, but whatever success they may have had was on the level of individual conversions; they were unable to keep the dealers off the streets for any sustained period of time.

<sup>32</sup>Isidor Chein et al., *The Road to H: Narcotics, Delinquency, and Social Policy* (New York: Basic Books, 1964), 271-275. Familial disorganization was also common among blacks who migrated to southern cities. See Joel Williamson, *The Crucible of Race: Black-White Relations in the American South Since Emancipation* (New York: Oxford University Press, 1984), 59.

<sup>33</sup>Anslinger and Chapman, "Narcotic Addiction," 182, 189-190.

<sup>34</sup>Musto, *American Disease*, 1973 edition, 230-232; Bonnie and Whitebread, *Marijuana Conviction*, 215; Edward M. Brecher et al., *Licit and Illicit Drugs* (Boston: Little, Brown, 1972), 419-420; Alfred R. Lindesmith, *The Addict and the Law* (Bloomington: Indiana University Press, 1965), 25-28, 33-34, 108; Lawrence Kolb, *Drug Addiction: A Medical Problem* (Springfield, Ill.: Charles C Thomas, 1962), 157-159.

<sup>35</sup>Morgan, *Drugs in America*, 147. See also McWilliams, "The Protectors," 193.

<sup>36</sup>John Kaplan, *The Hardest Drug: Heroin and Public Policy* (Chicago: University of Chicago Press, 1983), 70-72.

<sup>37</sup>Chein et al., *The Road to H*, 370-371. "The dope trade is by its very nature an extremely ruthless industry," Claude Brown has written. "Indeed, it attracts and is controlled by the most vicious, predacious, esurient and desperate elements of this society, who become negative idols for youth" ("Manchild in Harlem," *New York Times Magazine*, September 16, 1984, p. 54).

<sup>38</sup>Lewis Yablonsky, *Synanon: The Tunnel Back* (Baltimore: Penguin Books, 1967); Morgan, *Drugs in America*, 151-152. Morgan also shows that group therapy in narcotic treatment was not an entirely new idea. See his description of the late nineteenth-century Keeley Institute, 78-89.

<sup>39</sup>Lindesmith, *The Addict and the Law*, 124-128. For a more recent and balanced discussion of the heroin-crime connection, see Kaplan, *The Hardest Drug*, 51-58.

<sup>40</sup>Nat Hentoff, "The Treatment of Patients" [Profile of Dr. Marie Nyswander], *New Yorker* 41 (June 26, 1965), 45. More recently, Louis Nizer, in "How About Low-Cost Drugs for Addicts?" *New York Times*, June 6, 1986, E23, has complained that the illegality of cocaine, as well as heroin, has been responsible for a huge wave of street crime. See also Ethan A. Nadelmann, "Drug Prohibition in the United States: Costs, Consequences, and Alternatives," *Science* 245 (Sept. 1, 1989), 937-949.

<sup>41</sup>Bonnie and Whitebread, *Marijuana Conviction*, 213 et passim; Howard S. Becker, *Outsiders: Studies in the Sociology of Deviance* (London: Free Press of Glencoe, 1963), Chap. 7; Lindesmith, *The Addict and the Law*, Chap. 8; H.J. Anslinger with Courtney Ryley Cooper, "Marijuana: Assassin of Youth," *American Magazine* (July 1937), 18-19, 150-153.

<sup>42</sup>Ball and Chambers, eds., *The Epidemiology of Opiate Addiction*, 167-177, 194-196, 229-230, 312.

<sup>43</sup>Brecher et al., *Licit and Illicit Drugs*, 422, report that marijuana arrests in California rose from 1,156 in 1954 to 7,560 in 1964; two years later, in 1966, the total

stood at 18,243. The growing skepticism over the harmfulness of marijuana during the 1960s is discussed in Chap. 6 of Jerome L. Himmelstein, *The Strange Career of Marijuana: Politics and Ideology of Drug Control in America* (Westport, Conn.: Greenwood Press, 1983).

<sup>44</sup>James Hitchcock, *Years of Crisis: Collected Essays, 1970-1983* (San Francisco: Ignatius Press, 1985), 57.

<sup>45</sup>The head of New York's Phoenix House drug treatment program, Dr. Mitchell S. Rosenthal, makes a similar point in "Time for a Real War on Drugs," *Newsweek* 106 (September 2, 1985), 12-13. Conventional prosecute-the-dealer tactics, he concludes, are ineffective "unless we reach a consensus on the strict enforcement of drug laws. What is needed is broad societal *disapproval* of illicit drug use" (his emphasis). Rosenthal is correct. Informal social controls such as the disapproval of parents or peers are undoubtedly more effective than formal controls; moreover, drug laws are better enforced when an antinarcotic consensus exists. The problem is that there has been no such consensus since the middle-1960s; nor can it simply be willed back into existence, given that today's moral and social climate is so profoundly different from that of the classic era.

<sup>46</sup>Morgan, *Drugs in America*, 159-161.

<sup>47</sup>*Drug Addiction: Crime or Disease? Interim and Final Reports of the Joint Committee of the American Bar Association and the American Medical Association on Narcotic Drugs* (Bloomington: Indiana University Press, 1961; seventh printing in 1969), 19, 104-105.

<sup>48</sup>*Comments on Narcotic Drugs* (Washington, D.C.: Bureau of Narcotics, 1958), 1, 51, 81, 95, 119, 135, *et passim*; Diller in Sloman, *Reefer Madness*, 199-200. Anslinger had reacted in a similarly violent fashion to the so-called LaGuardia Report of 1944, which deemphasized the dangers of marijuana smoking. McWilliams, "The Protectors," 189-190.

<sup>49</sup>"Federal Narcotics Czar," 162.

<sup>50</sup>*American Disease*, 1973 edition, 234. The American Bar Association/ American Medical Association report controversy is discussed further in King, *Drug Hang-Up*, Chap. 18; Linde Smith, *The Addict and the Law*, 247-248; and William Butler Eldridge, *Narcotics and the Law: A Critique of the American Experiment*

*in Narcotic Control*, 2nd ed. (Chicago: University of Chicago Press, 1967), Chap. 3.

<sup>51</sup>370 U.S. 660; quotation at 666. Stewart's language reminds us again of addiction's status as a stigmatized disease. By the early 1960s, however, the Court, as well as the medical research establishment, was placing more emphasis on the disease aspect and less on the stigma.

<sup>52</sup>*Narcotic Addiction*, 169. Eldridge's *Narcotics and the Law*, cited above and first published in 1962, carried a similar message: "the treatment of addiction and research into possible preventative medicine are medical problems and should be dealt with as such." Eldridge accorded a role to law enforcement but argued that physicians should be free to individualize treatment, just as judges should be free to individualize sentences (118-125). *Narcotics and the Law* was published under the auspices of the American Bar Foundation.

<sup>53</sup>King, *Drug Hang-Up*, 235.

<sup>54</sup>President's Advisory Commission on Narcotic Drug Abuse, *Final Report* (Washington, D.C.: U.S. Government Printing Office, 1963), 6-9.

<sup>55</sup>Under the Controlled Substances Act of 1970, rather than the Harrison Act and related federal laws of the 1910s and 1920s, which have been superseded. For an overview of the statutory and regulatory changes that occurred during the 1970s, see Edward Lewis, Jr., and William M. Lenck, "Role of Law and State," in Sachindra N. Pradhan and Samarendra N. Dutta, eds., *Drug Abuse: Clinical and Basic Aspects* (St. Louis: Mosby, 1977), 515-534.

<sup>56</sup>Two very good articles on this subject are Mark Peyrot, "Cycles of Social Problem Development: The Case of Drug Abuse," *Sociological Quarterly* 25 (1984), 83-96, and Ronald Bayer, "Heroin Addiction, Criminal Culpability, and the Penal Sanction: The Liberal Response to Repressive Social Policy," in James C. Weissman and Robert L. DuPont, eds., *Criminal Justice and Drugs: The Unresolved Connection* (Port Washington, N.Y.: Kennikat, 1982), 94-103. "The current institutional system for dealing with drug abuse is a conglomeration of two contradictory approaches," Peyrot summarizes, "the newer, clinical approach has been 'tacked onto' the earlier criminal adjustment approach, rather than supplanting it" (91). Chap. 5 of

Peter Conrad and Joseph W. Schneider, *Deviance and Medicalization: From Badness to Sickness* (St. Louis: Mosby, 1980), is also of interest. David F. Musto shows, in Chap. 12 of the expanded edition of *The American Disease* (New York: Oxford University Press, 1987), that the hybrid police-medical policy was most in evidence during the 1970s. During the 1980s enforcement efforts received relatively higher priority.

<sup>57</sup>John Kaplan, *The Hardest Drug: Heroin and Public Policy* (Chicago: University of Chicago Press, 1983), 169, 182.

<sup>58</sup>Interview with Densen-Gerber, August 5, 1981.

<sup>59</sup>"Special Message to the Congress on Drug Abuse Prevention and Control, June 17, 1971," *Public Papers of the Presidents of the United States: Richard Nixon...1971* (Washington, D.C.: U.S. Government Printing Office, 1972), 739-749.

<sup>60</sup>"Reminiscences of a Drug Czar," in William R. Martin and Harris Isbell, eds., *Drug Addiction and the U.S. Public Health Service: Proceedings of a Symposium Commemorating the 40th Anniversary of the Addiction Research Center at Lexington, Ky.* (Washington, D.C.: Department of Health, Education, and Welfare, 1978), 287. The evolution of White House staff attitudes toward methadone is discussed in Edward Jay Epstein, *Agency of Fear: Opiates and Political Power in America* (New York: G.P. Putnam's Sons, 1977), especially Chaps. 13 and 14.

<sup>61</sup>Robert G. Newman, in collaboration with Margot S. Cates, *Methadone Treatment in Narcotic Addiction: Program Management, Findings, and Prospects for the Future* (New York: Academic Press, 1977), xix. New York City had already embarked upon large-scale methadone maintenance in 1970, the year before SAODAP was created.

<sup>62</sup>Musto, *American Disease*, expanded edition, 259.

<sup>63</sup>National Institute on Drug Abuse, *Federal and State Laws Pertaining to Methadone* (Washington, D.C.: Department of Health, Education, and Welfare, 1974), 6; see also Newman, *Methadone Treatment in Narcotic Addiction*, 73-74.

<sup>64</sup>Interview with Nyswander, June 22, 1981.

<sup>65</sup>Interview with Newman, July 24, 1981.

<sup>66</sup>Alan G. Sutter, "The World of the Righteous Dope Fiend," *Issues in Criminology* 2 (1966), 171-222, quotation at 200; see also Bill Hanson et al., *Life with Heroin: Voices from the Inner City* (Lexington, Mass.: Lexington Books, 1985), especially 126, 135-173.

<sup>67</sup>Paul J. Goldstein et al., "Drug Dependence and Abuse," in Robert W. Amler and H. Bruce Dull, eds., *Closing the Gap: The Burden of Unnecessary Illness* (New York: Oxford University Press, 1987), 89-101, quotation at 97.

<sup>68</sup>H.W. Cohen et al., "Behavioral Risk Factors for HTLV-III/LAV Seropositivity among Intravenous Drug Abusers," paper presented at the International Conference on the Acquired Immunodeficiency Syndrome (AIDS), Atlanta, April 14-17, 1985.

<sup>69</sup>Robert R. Redfield et al., "Heterosexually Acquired HTLV-III/LAV Disease (AIDS-Related Complex and AIDS) . . . , " *Journal of the American Medical Association* 254 (1985), 2094-96; Normand Lapoint et al., "Transplacental Transmission of HTLV-III Virus," *New England Journal of Medicine* 312 (1985), 1325-26.

<sup>70</sup>Kung-Jong Lui et al., "A Model-Based Estimate of the Mean Incubation Period for AIDS in Homosexual Men," *Science* 240 (1988), 1333-1335.

<sup>71</sup>Cf. Thomas J. Spira et al., "Prevalence of Antibody to Lymphadenopathy-Associated Virus among Drug-Detoxification Patients in New York," *New England Journal of Medicine* 311 (1984), 467-468; Jrog Schupbach et al., "Antibodies to HTLV-III in AIDS and Pre-AIDS and in Groups at Risk for AIDS," *New England Journal of Medicine* 312 (1985), 265-270; Giacchino Angarano et al., "Rapid Spread of HTLV-III Infection among Drug Addicts in Italy," *Lancet* (1985, Part 2), 1302; and J. R. Robertson et al., "Epidemic of AIDS-Related Virus (HTLV-III/LAV) Infection among Intravenous Drug Users," *British Medical Journal* 292 (1986), 527-529. See also Lawrence K. Altman, "New Fear on Drug Use and AIDS," *New York Times*, April 6, 1986, Sec. 1, pp. 1, 30; Ronald Sullivan, "New York State Rejects Plan to Give Drug Users Needles," *New York Times*, May 18, 1987, Sec. 1, p. 38; Lionel C. Bascom, "AIDS Shift Seen from Gay Men to Drug Users," *New York Times*, July 19, 1987, Sec. 11,

pp. 1, 19; and Philip M. Boffey, "Spread of AIDS Abating, but Deaths Will Still Soar," *New York Times*, February 14, 1988, Sec. 1, pp. 1, 36.

<sup>72</sup>S.R. Friedman et al., "AIDS and Self-Organization among Intravenous Drug Users," *International Journal of the Addictions* 22 (1987), 201-219; Don C. Des Jarlais et al., "Risk Reduction for the Acquired Immunodeficiency Syndrome Among Intravenous Drug Users," *Annals of Internal Medicine* 103 (1985), 755-759.

<sup>73</sup>Don C. Des Jarlais et al., "AIDS and Needle-Sharing within the IV-Drug Use Subculture," in Douglas A. Feldman and Thomas M. Johnson, eds., *The Social Dimensions of AIDS: Method and Theory* (New York: Praeger, 1986), 111-125.

<sup>74</sup>J. Jackson and S. Neshin, "New Jersey Community Health Education Project: Impact of Using Ex-Addict Educators to Disseminate Information on AIDS to Intravenous Drug Users," paper presented at the International Conference on AIDS, Paris, June 23-25, 1986; Jeffrey Schmalz, "Addicts to Get Needles in Plan to Curb AIDS," *New York Times*, January 31, 1988, Sec. 1, p. 1.

<sup>75</sup>William French Smith, "Drug Traffic Today--Challenge and Response: Excerpts from a report [sic] to the President's Cabinet Council on Legal Policy, March 24, 1982," *Drug Enforcement* 9 (Summer 1982), 2-6; Michael Hanchard, "New Varieties of Heroin Showing Up More In State," *Hartford Courant*, June 9, 1986, C1; "Special Report: Black Tar Heroin in the United States" (unpublished TS from Strategic Intelligence Section, Drug Enforcement Administration, March 10, 1986), i-ii; Peter Applebone, "On Border Patrol: Arrests and Futility," *New York Times*, August 3, 1986, Sec. 1, pp. 1, 22; and Peter Kerr, "Chinese Now Dominate New York Heroin Trade," *New York Times*, August 9, 1987, Sec. 1, pp. 1, 30.

<sup>76</sup>John P. Lyle, "Southwest Asian Heroin: Pakistan, Afghanistan, and Iran," Miguel D. Walsh, "Impact of the Iraqi-Iranian Conflict," and John Bacon, "Is the French Connection Really Dead?" all in *Drug Enforcement* 8 (Summer 1981), 2-6, 7-12, and 19-21, respectively; Alfred W. McCoy et al., *The Politics of Heroin in Southeast Asia* (New York: Harper and Row, 1973), 53-54, 244-246.

<sup>77</sup>Erich Goode, *The Marijuana Smokers* (New York: Basic Books, 1970), 3.

<sup>78</sup>Timothy Leary, "Some Superficial Thoughts on the Sociology of LSD," in Lester Grinspoon and James B. Bakalar, eds., *Psychedelic Reflections* (New York: Human Sciences Press, 1983), 32, 36. Chap. 2 of Goode, cited above, presents sampling data to the effect that marijuana smokers were more likely than nonsmokers to reject traditional values.

<sup>79</sup>Edward M. Brecher et al., *Licit and Illicit Drugs* (Boston: Little, Brown, 1972), 422; U.S. Senate, *Marijuana-Hashish Epidemic and Its Impact on United States Security: Hearings Before the Subcommittee to Investigate the Administration of the Internal Security Act and Other Internal Security Laws of the Committee on the Judiciary* (Washington, D.C.: U.S. Government Printing Office, 1974), 7-8; Institute of Medicine, *Marijuana and Health* (Washington, D.C.: National Academy Press, 1982), 36; Glenn Collins, "U.S. Social Tolerance of Drugs Found on Rise," *New York Times*, March 21, 1983, A1, B5; James Mills, *The Underground Empire: Where Crime and Governments Embrace* (New York: Doubleday, 1986), passim; Christine Russell, "One-Third of College Students Try Cocaine . . . Use of Marijuana and Other Drugs Appears to Have Declined," *Washington Post*, July 8, 1986, A3.

<sup>80</sup>Interview with Peter Santangelo, August 23, 1982.

<sup>81</sup>Institute of Medicine, *Marijuana and Health*, 37.

<sup>82</sup>Denise Kandel, "Stages in Adolescent Involvement in Drug Use," *Science* 190 (1975), 912-914, and Bruce D. Johnson et al., *Taking Care of Business: The Economics of Crime by Heroin Abusers* (Lexington, Mass.: Lexington Books, 1985), 182, 226-229.

<sup>83</sup>Table 1 in Kandel, above; 1982 National Household Survey on Drug Abuse data reproduced in Collins, "U.S. Social Tolerance," B5. It is also of interest that, among those who did progress to heroin, many apparently took precautions to avoid full-blown dependence. Heroin's reputation as an addicting drug preceded it. See Norman E. Zinberg, "Nonaddictive Opiate Use," in *Criminal Justice and Drugs*, especially 15.

<sup>84</sup>Carl D. Chambers and Leon G. Hunt, "Epidemiology of Drug Abuse," in Pradhan and Dutta, eds., *Drug Abuse*, Table 2-2, 13; Irving Faber Lukoff, "Consequences of Use: Heroin and Other Narcotics," in Joan Dunne Rittenhouse, ed., *Report of the Task Force on the Epidemiology of Heroin and Other Narcotics* (1976), 124-126; Leon Gibson Hunt, "Prevalence of Active Heroin Use in the United States," and S.B. Sells, "Reflections on the Epidemiology of Heroin and Narcotic Addiction from the Perspective of Treatment Data," both in Joan Dunne Rittenhouse, *The Epidemiology of Heroin and Other Narcotics*, NIDA Research Monograph 16 (Rockville, Md.: Alcohol, Drug Abuse, and Mental Health Administration, National Institute on Drug Abuse, Division of Research, 1977), 63-78 and 161-163, respectively; John C. Ball et al., "Characteristics of 633 Patients in Methadone Maintenance Treatment in Three United States Cities: 45 Preliminary Tables" (Report of the Methadone Research Project, 1986), Table 602. Sells remarks, "[a] polarity can be observed between *low socioeconomic level street heroin users*, at one extreme, and the *youthful, middle class, maladjusted, nonopioid users*, at the other" (163; italics in the original). Among minority groups, use by Hispanics has grown most rapidly in recent years, at least in New York City. See Blanche Frank et al., "Current Drug Use Trends in New York City, June 1986" (New York Division of Substance Abuse Services report), 1.

<sup>85</sup>Harry Anslinger and Kenneth W. Chapman, "Narcotic Addiction," *Modern Medicine* 25 (1957), 176.

<sup>86</sup>Harold M. Schmeck, Jr., "Cocaine is Re-emerging as a Major Problem, While Marijuana Remains Popular," *New York Times*, November 15, 1971, p. 82. In 1937, by comparison, federal officials seized more than 118 kilograms of heroin, as against only 827 grams of cocaine.

<sup>87</sup>Thomas L. Dezelsky et al., "A Ten-Year Analysis of Non-Medical Drug Use Behavior at Five American Universities," *Journal of School Health* 51 (January 1981), 52-53; "The Growth of Cocaine Abuse: A Report by the Strategic Cocaine Unit of the DEA Office of Intelligence," *Drug Enforcement* 9 (Fall 1982), 18-20; Charles Blau, "Role of the Narcotic and Dangerous Drug Section in the Federal Government's Fight Against Drug Trafficking," *Drug Enforcement* 11 (Summer 1984), 17; Peter Kerr, "Rising Concern on Drugs Stirs Public to Activism," *New York Times*,

August 10, 1986, Sec. 1, p. 28; Joel Brinkley, "Experts See U.S. Cocaine Problem as Continuing Despite Big Raids," *New York Times*, August 24, 1986, Sec. 1, p. 1; Louis L. Cregler and Herbert Mark, "Medical Complications of Cocaine Abuse," *New England Journal of Medicine* 315 (1986), 1495-1500; Elaine Sciolino with Stephen Engelberg, "Drive Against Narcotics Foiled by Security Fears," *New York Times*, April 10, 1988, Sec. 1, p. 1; and Rensselaer W. Lee, III, *The White Labyrinth: Cocaine and Political Power* (New Brunswick, N.J., and London: Transaction Publishers, 1989).

<sup>88</sup>Selwyn Raab, "Drug Flood Altering Patterns of Use," *New York Times*, May 20, 1984, p. 50. Statistical information on the use of cocaine and other drugs by methadone patients may be found in Ball et al., "Characteristics," Tables 621-626.

<sup>89</sup>Newman interview, cited above. See also Barry Spunt et al., "Methadone Diversion: A New Look," *Journal of Drug Issues* 16 (1986), 569-583, and James V. Spotts and Franklin C. Shontz, *The Life Styles of Nine American Cocaine Users: Trips to the Land of Cockaigne* (Washington, D.C.: U.S. Government Printing Office, 1976), 14. A good, if somewhat exaggerated, example of the criticism generated by diversion and "cheating" is Epstein, *Agency of Fear*, 246-250.

<sup>90</sup>The idea that increased cocaine consumption was partly a substitute for amphetamines is developed in Brecher et al., *Licit and Illicit Drugs*, 267-303. Brecher published his study in 1972; for most of the 1970s amphetamine use continued to decline as cocaine use rose. See Robert D. Budd, "Drug Use Trends among Los Angeles County Probationers over the Last Five Years," *American Journal of Drug and Alcohol Abuse* 7 (1980), 59; Goldstein et al., "Drug Dependence and Abuse," 94.

<sup>91</sup>Wholesale price data are in "Nation's No. 1 Concern, but Politics Blurs Facts," *New York Times*, September 9, 1984, p. 12; for retail prices see Thomas E. Ricks, "The Cocaine Business: Big Risks and Profits, High Labor Turnover," *Wall Street Journal*, June 30, 1986, p. 1. Terry Williams, *The Cocaine Kids: The Inside Story of a Teenage Drug Ring* (Reading, Mass.: Addison-Wesley, 1989), is a superb ethnographic study of the spread of cocaine trafficking and use among the urban poor.

<sup>92</sup>"Special Report: Black Tar Heroin in the United States," 19; the shotgun analogy is from Dr. Frank Gawin, remarks made at "The Cocaine Epidemic: A Symposium on Assessment and Treatment Approaches," University of Hartford, June 13, 1986.

<sup>93</sup>Robert D. Budd, "The Use of Diazepam and of Cocaine in Combination with Other Drugs by Los Angeles County Probationers," *American Journal of Drug and Alcohol Abuse* 8 (1981), 249-255. [William Hopkins], "A Study of Crack Smokers" (NYDSAS Report, June 6, 1986), 2, notes that a variety of drugs, including pills, alcohol, and marijuana, have been used to cope with the aftereffects of crack. For more on the spread of crack smoking and its consequences, see James N. Hall, "Cocaine Smoking Ignites America," *Street Pharmacologist* 9 (January, 1986), 1, and Williams, *Cocaine Kids*.

<sup>94</sup>*Newsweek* is representative of the change. In 1971 its coverage was balanced, matter of fact, and decidedly not alarmist; by 1986 crack was on the cover and held responsible for "an epidemic of urban lawlessness" and the destruction of "thousands of young lives" (cf. "It's the Real Thing," *Newsweek* 78 [September 27, 1971] and Tom Morganthau et al., "Crack and Crime," *Newsweek* 107 [June 16, 1986]).

<sup>95</sup>Quoted in Erik Eckholm, "Cocaine's Vicious Spiral: Highs, Lows, Desperation," *New York Times*, August 17, 1986, Sec. 4, p. 24. See also the comments by Frank Gawin in Virginia Cowart, "National Concern About Drug Abuse Brings Athletes Under Unusual Scrutiny," *Journal of the American Medical Association* 256 (1986), 2459.

<sup>96</sup>Sheila Blume, "National Patterns of Alcohol Use and Abuse," in Robert B. Millman et al., eds., *Research Developments in Drug and Alcohol Use* (New York: New York Academy of Sciences, 1981), 6; David E. Kyvig, *Repealing National Prohibition* (Chicago: University of Chicago Press, 1979), 202. On the recent decline in consumption, see U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1986* (Washington D.C.: U.S. Government Printing Office, 1985), 759.

<sup>97</sup>"Letter from a Master Addict to Dangerous Drugs," *British Journal of Addiction* 53 (1957), 128. This article was written in Venice, Italy, in 1956 and published in January 1957.

<sup>98</sup>Gawin symposium remarks.

<sup>99</sup>Santangelo interview.

<sup>100</sup>On the European situation see Lee I. Dogoloff and Caroline M. Devine, "International Patterns of Drug Abuse and Control," in Millman et al., 17, and Laura M. Wicinski, "Europe Awash with Heroin," *Drug Enforcement* 8 (Summer 1981), 14-16.

<sup>101</sup>David L. Westrate, "Drug Trafficking and Terrorism," *Drug Enforcement* 12 (Summer 1985), 19-24; Alan Riding, "Colombians Grow Weary of Waging the War on Drugs," *New York Times*, February 1, 1988, A1, A14; and Mills, *Underground Empire*, 3, 547, 561, 807, 1139-1143, 1149-1158, et passim. The DEA agents were Enrique Camarena, who was murdered in a way that suggests official collusion, and Victor Cortez, who was tortured by the Jalisco state police.

<sup>102</sup>Mathea Falco, "The Big Business of Illicit Drugs," *New York Times Magazine*, December 11, 1983, p. 110; "Lucrative, Illegal and Corrupt," *World Development Forum*, 5 (November 15, 1987), 2. Lee, *The White Labyrinth*, is particularly good on the importance of cocaine to the Andean economies.

<sup>103</sup>James Chace, "Getting to Sack the General," *New York Review of Books* 35 (April 28, 1988), 52-53; Mills, *Underground Empire*, 218-223, 358-365, 383-385, 727, 731, 788-789, 1133, 1140-1142; McCoy et al., *Politics of Heroin*, 218, 264-281, 309-313, 350.

<sup>104</sup>This occurred chiefly during World War II, which was otherwise a boon to Anslinger's efforts to control the international traffic. The American branch of the Mafia collaborated with the Office of Naval Intelligence in providing waterfront security for New York City; the Sicilian branch helped the army with the reconquest and occupation of Mussolini's Italy. One result was that Luciano was released from prison, deported, and able to play a key role in reviving the postwar heroin trade (McCoy et al., *Politics of Heroin*, 20-29).

<sup>105</sup>"Reagan Urges Crusade Against Drug Scourge," *Hartford Courant* [from combined wire services], August 5, 1986, A1, A8; Bernard Weinraub, "Reagan Seeks Drug Tests for Key U.S. Employees," *New York Times*, August 5, 1986, A24; videotape of President and Mrs. Reagan's televised address of September 15, 1986.

<sup>106</sup>The Reagan administration subsequently reneged on some of the promised expenditures; cf. Linda Greenhouse, "Congress Approves Anti-Drug Bill as Senate Bars a Death Provision," *New York Times*, October 18, 1986, pp. 1, 33, and Bernard Weinraub, "In Reagan's Drug War, Congress Has the Big Guns," *New York Times*, March 15, 1987, Sec. 4, p. 5. The political logic of this bill, which President Reagan signed into law on October 27, 1986, is apparent when one considers poll data showing that Americans then ranked drug abuse as a national problem second only to the federal deficit (*Wall Street Journal/NBC News Poll*, p. 1 of the *Journal* for October 24, 1986). Politicians were not the only ones to jump on the antidrug band wagon. Journalists and editorialists also scrabbled aboard: "It's time to take the gloves off. Time to act ruthlessly, without pity. Without remorse. Remove the scum that peddles this poison. What is so difficult? Arrest them. Lock them up and throw away the key" (full-page ad sponsored by *Hartford Courant*, November 19, 1986, E9). The same sort of rhetoric could have been found in virtually any Hearst newspaper in the 1920s and 1930s.

<sup>107</sup>See Brecher et al., *Licit and Illicit Drugs*, passim.

<sup>108</sup>Grinspoon and Bakalar, eds., *Psychedelic Reflections*, 22.

<sup>109</sup>Quoted in "What is Our Drug Problem?" *Harper's* 271 (December 1985), 51.

<sup>110</sup>William Butler Eldridge, *Narcotics and the Law*, 2nd rev. ed. (Chicago: University of Chicago Press, 1967), 118.

<sup>111</sup>For a review of the statistical information on this point, see Chap. 4 of Alfred Lindesmith, *The Addict and the Law*, and Chap. 5 of Courtwright, *Dark Paradise*. There was a long-term decline in the total number of narcotic addicts between 1910 and 1940, but this was due primarily to a decline in *medical* addiction. Very few new medical addicts were being created and many old ones, left over from the nineteenth century, were dying off. The Bureau's efforts were targeted at nonmedical addicts, and their numbers did not appreciably diminish, except during World War II.

## **FEDERAL LEADERSHIP IN BUILDING THE NATIONAL DRUG TREATMENT SYSTEM**

*Karst J. Besteman*

This paper is meant to highlight some of the knottier questions that the national policy community must answer to bring the drug treatment system into the 1990s. These questions are not new; they have been faced before and answered at different points in various ways. The nation's present multilayered system is in part the result of those decisions and carries within it trenchant lessons about the operational consequences that flow from philosophical and political choices at the highest levels.

This paper outlines the history and development of the federally supported drug treatment system from the 1960s to the present. First, it notes the role of new therapeutic ideas in the 1960s. At the outset, the federal system consisted of two prison-based hospitals that had been established for narcotic addiction treatment in the 1920s and 1930s in Lexington, Kentucky, and Fort Worth, Texas. These prison-hospitals were the basic federal foundations on which new, independent treatment services were grafted as the government began to respond to the rising tide of drug problems in the 1960s.

The first of these innovative modalities was the TC, or therapeutic community, which began with the California-based Synanon, followed by New York's Daytop Village, Odyssey House, and Phoenix House. As these modalities were becoming refined, the states of California and New York were taking the first steps toward mandating commitment to treatment through the criminal justice system. These state plans and other therapeutic approaches round out the early period.

The next section of the paper deals with legislative reform. It first discusses President Kennedy's Commission on Narcotics and Drug Abuse and the

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national climate that brought it about. Although the commissions' recommendations were not acted upon because of the abrupt change of administrations in the aftermath of November 1963, Congress later enacted one of its key recommendations in the form of the Narcotic Addict Rehabilitation Act (NARA) of 1966, which established a federal program of civil commitment of narcotic addicts. This section of the paper describes the implementation of NARA and the treatment programs it developed, programs that departed significantly from the concepts embodied in the act.

The next section details the administrative moves and comprehensive legislation of the early 1970s that arose in response to an explosion of concern over drug addiction in connection with the rapidly rising crime rate. The Nixon administration acted decisively with the establishment of the Special Action Office for Drug Abuse Prevention (SAODAP) in 1972. The National Institute of Mental Health was subsequently reorganized into the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA), giving birth to the National Institute on Drug Abuse (NIDA), which took in previously scattered authorities and dollar pools. Management procedures in SAODAP and NIDA, and changes that began to take place in the federal drug treatment system in the middle 1970s, conclude this section.

The paper then treats the phase of consolidation of federal programs, changes that took place during the Carter and Reagan administrations. There was a shift in the outlook on the drug "problem" during the Carter years, and inflationary effects badly eroded the funding of programs. The section then details Reagan administration policies -- in particular, the conversion to block grants -- that gave states much greater responsibility for maintaining treatment programs.

The paper's final section examines the overall federal role in funding drug abuse treatment and outlines some conclusions about how the federal government might best fulfill its leading role. It stresses the need for experienced clinical personnel and for the federal government to have sufficient manpower and experience on hand to rebuild the national data system. It also emphasizes the importance of experienced leadership to deal with other interests at the federal level.

## EARLY PROGRAMS

From the mid-1930s until the mid-1960s, the entire federal drug treatment system consisted of two prison-hospitals: Fort Worth and Lexington. At these facilities the primary patients were federal prisoners transferred to the custody of the Public Health Service (PHS). Subject to available capacity of the hospitals, voluntary patients were also accepted for treatment. The programs and contributions of these two facilities are recognized as laying important groundwork in the understanding and treatment of addiction (Maddux, 1978). Aside from these two programs, however, drug treatment facilities and regimens prior to the 1970s were quite limited. Even more significant than the rudimentary treatment were the study opportunities provided by PHS residencies, fellowships, and research agreements. A cadre of psychiatric clinicians and social researchers were schooled at Lexington and Fort Worth in the 1950s and 1960s, and their clinical and research work became the foundation on which a great deal of the treatment expansion of the 1960s and 1970s was based.

In the late 1950s, a small group of ex-addicts, most with long criminal records and previously failed treatment attempts, joined together under the guidance of a recovering alcoholic, Charles Diedrich, to form Synanon, the first self-help therapeutic community. Synanon established the early pattern for programs that today provide the majority of community-based residential treatment for drug abuse and addiction (Yablonski, 1965).

The Synanon experience was the tap root for several other treatment programs that began in the 1960s, such as Daytop Lodge, Odyssey House, and Phoenix House. These organizations differed from Synanon in that the staff were a mix of professional and ex-addict counselors and directors (compared with the all-ex-addict staff at Synanon). The Synanon leadership was hostile and critical of these new programs and their reliance on certified professionals in the treatment field (Maddux, 1978). Between these two types of therapeutic communities there arose rivalries that in the very early stages of treatment service development caused confusion in public understanding and support (Densen-Gerber, 1973).

In the early 1960s, California and New York adopted a mandated treatment system using commitment by the courts to an enforced term of treatment. In California, the Civil Addict Program was administered by a separate authority within the criminal justice system using a large facility at Corona for the inpatient phase (Wood, 1966). Under the supervision of a specially chartered parole authority, the patient was closely supervised (through urine testing) after release. Failure to remain drug free resulted in a return to the correctional facility for further treatment.

In New York, a distinct independent agency, the Narcotic Addiction Control Commission, was established to administer treatment to persons committed from the civil and criminal courts. Its procedures allowed narcotic addicts to be treated within the corrections department and within mental health facilities. There was extensive supervision with a greater emphasis than in other correctional units on returning the addict to his home community.

The early optimism of these two programs, with their ability to retain patient contact through court orders, was an important factor in the federal decision to promote civil commitment. The California and New York programs were instrumental in paving the way for later federal initiatives (Meiselas, 1966).

Also in the 1960s, Drs. Vincent Dole and Marie Nyswander, working in New York City, began to treat heroin addicts by experimenting with sustained drug substitution and maintenance. After unsatisfactory results with morphine and other narcotics, they were impressed by the results of methadone. (This synthetic opiate was developed in Germany during World War II; it was later studied at Lexington and used there for detoxification purposes. Methadone's therapeutic safety and efficacy were established for detoxification and as a postoperative analgesic by the mid-1950s [Dole and Nyswander, 1965].) By carefully selecting their early subjects, establishing a strong therapeutic rapport with and commitment to the patients, and risking professional criticisms and even prosecution for unorthodox and legally uncertain practices in prescription of a narcotic, Dole and Nyswander were able to gather remarkable cumulative anecdotal and statistical evidence of a new use for this already approved pharmaceutical drug.

Not only did the methadone program receive a great deal of interest within New York City but a series of annual conferences sponsored by the National Association for the Prevention of Addiction to Narcotics (NAPAN) resulted in rapid dissemination of the details of the early clinical experiences to other localities and the development of a close professional network to promote the use of methadone in treating heroin addiction (see, for example, National Association for the Prevention of Addiction to Narcotics, 1970, 1972, 1973). All of the major decisions and issues of dispute regarding methadone maintenance were framed during the annual meetings of NAPAN. Dr. Jerome H. Jaffe, who was later named the Nixon administration's "drug czar," stated clearly that, given fiscal constraints and the need to choose between dispensing methadone to many addicts and providing rehabilitative services to a few, he would opt for prescribing the drug [methadone] (Jaffe, 1970). Dr. William Martin, director of the National Institute of Mental Health (NIMH) Addiction Research Center at Lexington, in writing a summary of the Second National Conference on Methadone Treatment in 1970, noted with disappointment that established clinical

research criteria were not being met by proponents of the modality in their evaluation of the treatment (Martin, 1970).

Additionally, during this period in the early 1960s, a variety of small demonstration programs sprang up across the country with the help of very modest federal funding. Basically, these programs applied known intervention and rehabilitative services to an addicted population, with rigorous evaluation of the outcomes. None of these early demonstration programs were highly publicized. Most of the program leaders labored in widely scattered communities, each experiencing some limited success. One program in particular, under the joint sponsorship of the Public Health Service, the Vocational Rehabilitation Administration, and the Texas Christian University, brought representatives from local programs together to define the state of the art in drug abuse treatment and to provide guidelines for future treatment programs (U.S. Department of Health, Education and Welfare, 1966).

At about this same time, Attorney General Nicholas Katzenbach testified to the Senate Judiciary Committee that, in order to reform the federal courts and to better serve the many narcotic addicts across the country, he was proposing a civil commitment procedure that could be invoked in lieu of prosecuting drug-related crimes. The Public Health Service, which had initially opposed the creation of the two federal treatment centers at Lexington and Fort Worth, now endorsed Katzenbach's proposal as helping to strengthen the treatment system by ensuring an intense and lengthy aftercare (Maddux, 1978). No data were produced by witnesses, but there was unanimous professional agreement in favor of civil commitment.

Another important development occurred in Puerto Rico in 1961. An addiction treatment program was instituted that had as its major component a recognition of the need for social retraining and long-term efforts at reintegrating addicts into the community. The addicted patient would benefit from a long-term regimen that had four distinct phases: induction, intensive treatment, reentry

into the community, and prevention. The program assumed that the addict's behavior derived over the years from a value system and attitude toward life that was not compatible with society's demands. Much of the treatment offered in the program was a highly structured re-education process (Ramirez, 1966).

During this period there were also ongoing efforts to achieve improvements in program evaluation and treatment outcome studies as a means of determining which elements of treatment were effective in changing the addicted patient's behavior.

## EARLY LEGISLATIVE REFORM

### National Addict Rehabilitation Act

In 1962 the convening of the Presidential Commission on Narcotics and Drug Abuse was an important step at the policy and legislative levels. Judge E. Barrett Prettyman headed the commission, which was chartered by President Kennedy to examine the issues and recommend new approaches. (Commissions were a standard tool for examining issues on which the Kennedy administration had no clear policy position.) This presidential commission was proposed by Attorney General Robert Kennedy who may have been responding to the reviews by professional associations that were completed shortly before the commission was formed. During its tenure the commission heard extensive testimony about all aspects of the narcotics problem and ultimately offered 25 recommendations in its report, which was presented to the President a few days before his assassination. Most of the commission's recommendations were never acted upon. One recommendation however, later became law--that is, the recommendation calling for a federal civil commitment law that would be designed particularly to deal with federal offenders within the sentencing process of the federal courts. This law was implemented by legislation known as the Narcotic Addict Rehabilitation Act (NARA) of 1966 (Public Law 89-793).

In developing this legislation, Congress added two titles: the first enabled a person to voluntarily seek federally funded treatment by self-commitment in a federal court, and the other authorized federal government support of state and local programs through a grant-in-aid program. NARA, in its final form, laid the groundwork for a federally funded national drug treatment system, although the decision to proceed with such a system was not made until 1971.

As proposed by the Johnson administration, NARA had two basic concepts. First, defendants without prior convictions or without a charge involving a violent act who appeared before a federal judge could request that the charges be held in abeyance while they received treatment for addiction. If the individual successfully completed treatment--including an extended period (2-1/2 years) of community supervision--the courts had the authority to drop the charge. If the individual was unsuccessful in completing the inpatient treatment and aftercare programs, the charges could be reinstated and a trial scheduled. Second, if a defendant was found guilty and a determination made that he or she was in need of treatment for an addiction, the court could order that treatment to be provided during incarceration.

In Attorney General Katzenbach's testimony before the Senate Judiciary Committee in 1966, he stated, "I would not be speaking here in support of this bill if I did not consider it an essential part of our fight against crime." Later he added, "The real question is how much longer we can allow the public safety to be endangered by continuing the primitive, strictly punitive approach to addiction which has spread like a plague even as penalties against it have stiffened" (Martin and Isbell, 1978). The law and its intent, as reflected in this testimony, were substantially different from what was being implemented.

The legislative history of NARA depicts the proposed arrangement as an entirely closed-ended system of federal courts, federal prisons, federal hospitals, and a small number of federal clinics providing locally supervised aftercare. The implementation was very different. There was

virtually no lead time to implement the act before commitments began, there were sharp federal manpower restraints, and the geographic distribution of patients entering the system was much greater than expected. As a result, the treatment system consisted of federal facilities providing primary inpatient services and private contractors providing outpatient aftercare services.

The National Institute of Mental Health (NIMH) was given the responsibility to implement NARA. In a speech in February 1967, the director of NIMH, Stanley Yolles, proposed a network of 11 Public Health Service clinics in those cities having the largest numbers of narcotic addicts (Boston, Buffalo, Chicago, Cleveland, Detroit, Los Angeles, New Orleans, New York, Philadelphia, San Francisco, Washington, D.C.). This network would require between 80 and 90 full-time clinicians and would use Public Health Service clinics, which were then providing primary health care to American seamen. The plan assumed that all patients for these civil commitment programs would come from the metropolitan areas with the largest known heroin addict populations.

However, when it was finally implemented, the NARA program followed none of these specifications. One reason for the change was that only 15 full-time employees were allocated to NARA activity for the first year. NIMH had developed an implementation plan that envisioned the gradual initiation of the inpatient phase of treatment, which in turn would enable new staff to be recruited, and allow the identification of treatment agencies that would provide aftercare services in the addicts' home communities. The U.S. District Court, however, began committing patients to these programs before they were officially opened, forcing a rapid revision of the concept.

These factors generated a series of management decisions that in the end would have a major impact on the ability of the federal government to implement a national treatment system. Without fully appreciating the long-term implications of these decisions, the staff at NIMH had set in motion the ideas that led eventually to the

provision of all phases of treatment within patients' home communities. Under the program's early pattern, virtually all services were provided on an outpatient basis, a decision originally driven by budget constraints. Later, however, outpatient service became the model treatment setting. These developments coincided with a rapid infusion of money and demands for expansion of the national treatment capacity.

NARA's implementation was an important step toward a national drug treatment system for three reasons. First, it brought together within the government a group of people who were experienced in treating narcotic addicts and who were free to try ideas that were impossible to test in the isolation of the two existing federal hospitals. Second, the new law required that treatment be available no matter where the patient lived. This requirement forced agencies and individuals to address addiction treatment in communities that had not yet admitted that they had residents who were addicts. Third, the critical need to train personnel was recognized early on, and hundreds of professionals were introduced to the clinical skills needed to deal with narcotic addicts.

The NARA treatment system consisted of three phases: examination and evaluation, inpatient treatment, and aftercare. The examination and evaluation of applicants to NARA programs was contracted out during the second year of the program to enable the two Public Health Service hospitals to concentrate their efforts on the inpatient task. From the beginning, aftercare was provided by contracting for these services in the patient's home community.

There was a concerted effort by NARA staff to design, provide, and require training for the clinicians employed by the contract treatment agencies. Training programs were designed by experienced professional treatment staff of the Narcotic Addict Rehabilitation Branch of NIMH. Most of these individuals had experience with heroin addicts at Lexington or Fort Worth, and some had experience from early community demonstration projects supported by the Vocational

Rehabilitation Administration or the Office of Economic Opportunity (OEO). The training was delivered with the help of a small group of ex-addicts who were working in the earliest community grants programs. The training consisted of lectures and demonstrations, often with the ex-addicts role-playing the part of active street-wise addicts. This program was the forerunner of the federal role as a major training resource in the addiction field.

There was a fourth critical element in NARA: federal contract management. NARA/NIMH produced a standard contract governing its treatment agencies, which specified the frequency and purposes of patient contact. It covered the number of weekly counseling sessions (three), frequency of urine tests (one per week), allowable dental services (only restoration), psychological consultations, vocational training (state eligibility criteria were used), and accepted treatment modalities (drug-free out-patient, therapeutic community, methadone maintenance). Exceptions to these general contractual terms could be approved on special request to a central clinical review board.

The number of exceptions requested in the NARA system was remarkably small. Most counselors had little depth of experience in treating narcotic addicts and initially simply followed the contract terms to the letter. Early exception requests were to purchase cosmetic surgery, watches, and used cars. Although the authority to purchase these items was available, the requests were refused. As the counselors became more knowledgeable, their requests were more likely to be for expanded use of residential treatment or methadone maintenance rather than outpatient drug-free regimens.

### Other Legislation

In retrospect, this sequence of events has the progression and the nature of a planned strategy. The reality was that, from 1967 to 1971, the greater political community and the perceived public threat of a drug abuse epidemic kept pressure on NIMH to increase its commitment to support drug abuse treatment. One of the actions

taken by the institute in this regard was the formation of the Division of Narcotic Addiction and Drug Abuse (DNADA). NIMH consolidated all elements of its programs related to drug abuse into this one organization. It encompassed intra- and extramural research and treatment, as well as the provision of public information and training. The consolidation of these functions prepared for the establishment of the National Institute on Drug Abuse in late 1973.

During the late 1960s there were also other related events that prepared the treatment system for an all-out expansion effort. The amendment of the Community Mental Health Centers Act (Public Law 91-513) mandating and supporting the provision of drug abuse and alcoholism treatment within community health facilities helped influence the service delivery field to address drug addiction treatment. Further more, the initiative by the Office of Economic Opportunity in supporting community-based treatment of alcoholism and drug abuse, along with the requirement that people within the services community be part of the care-giving staff, enabled some nontraditional treatment agencies to win federal support and achieve financial stability.

Both of these efforts, although limited in size and scope, expanded the numbers and locations of people able and willing to provide services to narcotic addicts. The combination of approximately 150 NARA contractors, 25 community mental health centers (CMHCs), and 20 OEO service centers formed the early provider base for the rapid expansion of federal support for drug abuse treatment. In addition to these programs, there were other groups that were growing at the same time but outside of federal support. For example, the state of New York was funding community treatment programs within the methadone maintenance and therapeutic community modalities, and Illinois had initiated a modest community treatment effort at the University of Chicago. These programs also proved useful during this era of rapid expansion.

During 1968-1969, NIMH's Division of Narcotic Addiction and Drug Abuse (DNADA) made a

decision regarding methadone treatment that had profound effects on later events. Over the objection of both the Food and Drug Administration and against the advice of the NIMH director, the director of DNADA, Dr. Sidney Cohen, submitted an investigative new drug (IND) application for methadone as a maintenance treatment for narcotic addiction. Methadone was already approved as an analgesic and could be prescribed to assist in the withdrawal from heroin. However, its use in treating heroin addiction had as yet no standing or approval from the Food and Drug Administration, which became a bureaucratic impediment to its wider use in treating heroin addiction. Nevertheless, all DNADA grantees and contract care providers were encouraged to participate in methadone programs, a policy that in a relatively short period of time produced a large body of data about the use and effectiveness of methadone maintenance. The data also documented the relative safety of using methadone with heroin addicts. Without these extensive data files, the government's decision in 1972 to produce the regulatory guidance and approval of methadone as a maintenance therapy might have been frustrated. (The regulations were published in 1972 in the Federal Register, Vol. 37, No. 242, Part 3.)

Before the 1972 approval of methadone maintenance, there was serious concern among NIMH professional staff that methadone would not deliver the positive therapeutic impact being claimed by its supporters. There was a strong desire to delay its approval subject to more extensive evaluation coupled with the fear that the public was being sold a "magic bullet." All of these concerns had some validity, but that validity was ignored by those in the Nixon Administration who advocated the rapid expansion of the capacity of methadone clinics. NIMH was characterized as opposing President Nixon's program, and this perception generated tension and hostility between the staff of the White House Special Action Office and NIMH's Division of Narcotic Addiction and Drug Abuse during 1971 and 1972. The end result was a period of micromanagement by the Special Action Office of NIMH drug abuse grant awards.

## LEGISLATIVE EXPANSION

### Special Action Office for Drug Abuse Prevention

The period from 1971 to 1975 was the most fruitful and productive in federal history in establishing and expanding drug treatment services. The reasons for this expansion are diverse, and they spring from very different concerns and decisions. During the 1968 presidential campaign, both Nixon and Humphrey committed themselves to expanding support for the NARA programs, in part because of increasing concern among the general public over the spread of drug abuse. The use of marijuana and other nonopiate drugs had become a symbol of rebellion among the nation's youth, and communities that heretofore had not experienced drug addiction were reporting known narcotic users. Furthermore, a rising number of addicted people were being arrested for property crime. The emerging treatment modalities offered hope that the treatment of addiction would have positive outcomes. In addition, there was a growing commitment to community-based treatment.

Early in 1971, President Nixon announced a program to address the drug problem. Drug abuse, according to his advisors, was a major influence on the escalating crime rate (Ehrlichman et al., 1971). The President was determined to address "crime on the streets," and he wished to make the District of Columbia an example of an effective response to crime. The available information seemed to indicate that, without some significant intervention in the pattern and frequency of the abuse of illicit drugs, crime would continue unabated. Consequently, the President's anti-drug strategy was for the most part a more aggressive approach to federal support and leadership of law enforcement activities. The literature and data compiled by the District of Columbia's criminal justice system promoted the concept that methadone maintenance programs successfully demonstrated a reduction in criminal behavior by addicts who were in treatment. There was also other research coming to light that concluded that sustaining a patient on an outpatient

basis with close supervision and daily contact was more cost-effective than full-time incarceration (Sells, 1972). These findings led the President to the decision that federal investment in drug treatment would reduce crime and save money. Consequently, on June 17, 1971, President Nixon issued Executive Order 11599 in which he established the Special Action Office for Drug Abuse Prevention (SAODAP). Dr. Jerome Jaffe, who was appointed its director, came to the post from the Illinois Drug Abuse Program in Chicago. The President spelled out in broad outline how this office, over a three-year life span, would organize, direct, and evaluate the entire federal effort to solve this difficult problem. Concurrently, the President asked Congress for significant increases in funding for the support of community-based treatment programs. In addition, he also sent legislation to Congress requesting speedy establishment of SAODAP.

The establishment of SAODAP came at a crucial time because the Special Action Office was able to initiate actions with specific goals and within time frames that usually were not realistic within the federal system. Almost immediately SAODAP required that hospital treatment beds be reduced to 2 percent of the treatment slots in any community. (Approximately 10 percent of the treatment slots had been available through contracts with hospitals for designated beds for withdrawal and medical emergencies. Review of bed utilization revealed that these inpatient beds were unused and unneeded, and the money supporting hospital beds was converted to the support of outpatient treatment slots.) The SAODAP legislation also established stringent restrictions of 8 percent on the administrative costs paid by the states and state programs as overhead. Then, building on the work done in the NARA program to define treatment, SAODAP produced treatment guidelines that standardized the service expectations of the federal system for the programs receiving federal support (Special Action Office for Drug Abuse Prevention, 1974a-1974e).

In another arena, SAODAP intervened with the military regarding the use of drugs by troops in Vietnam. Dr. Jaffe, as director-designate of the

Special Action Office, spearheaded an effort to address the use of heroin by the military. He convinced President Nixon to order the Department of Defense to immediately identify drug users and addicts and offer them treatment. Drug use per se was not to be a court-marshall offense, although addicted servicemen, after remaining in treatment for 30 days, would then be discharged to civilian status (Jaffe, 1978). This approach was successful and served as a distant precursor to the Department of Defense urine testing program of recent years.

Another major successful action by SAODAP was its 1972 effort to "buy" the community treatment waiting lists that had developed around the country. Community treatment agencies were at 100 percent of utilization of their designed and funded capacity and were compiling long waiting lists of individuals requesting treatment. These waiting lists represented, in an imprecise manner, an additional need for treatment that was forced to go unmet until more federal dollars became available. SAODAP's project of providing the funds necessary to offer treatment to those on the waiting lists was implemented jointly by the Office of Economic Opportunity and the National Institute of Mental Health. Its message to communities was that the federal government was serious about its commitment to expanding drug treatment.

The enabling legislation that established SAODAP also authorized the formula grant and the submission of state drug abuse treatment plans. The Department of Health, Education and Welfare had a long history of distributing money to states for health and welfare programs on the basis of formulas taking into account population and poverty levels (average income). The SAODAP legislation required that, in addition to the usual criteria, there be a weighing of the formula by a severity index of the drug problem in the state. This requirement set off a major debate as the states and the federal government disagreed over what data elements accurately represented a state's drug abuse problem. The compromises needed to gain consensus resulted in a drug severity index that weighted problem size largely according to total population. The law also required that some

organization within the state government be designated as responsible for state programming in drug abuse.

One important result of this 1972 legislation was that it gave the treatment and prevention community at the state level some resources to build programs at the local level, which provided these agencies with an economic base similar to Law Enforcement Assistance Administration grants to state law enforcement agencies, thus improving their competitive position in the political debates over allocation of state resources. It also provided the opportunity to involve the state governments in the management of the drug treatment system.

As the massive size of the task to establish a national drug treatment system became clear, NIMH, with the endorsement of SAODAP, contracted for technical assistance to grantees. This assistance provided for help in three areas: (1) basic management of the federally funded project, (2) clinical care of patients, and (3) data acquisition and transmission. Because there were no established standards to apply in these areas, DNADA and SAODAP agreed that poor performance by a grantee in any one of the three areas would trigger technical assistance. The contractors NIMH engaged were private firms known nationally for their work in the private sector. They functioned as a temporary extension and enhancement of the federal capacity to manage the national treatment program.

The first criterion for technical assistance was a request for help from a grantee. A second criterion was the listing of a program in the bottom 10 percent nationally on any performance indicator tracked by NIMH—for example, patient utilization of the program, average frequency of patient contacts, or rate of patients leaving the program against staff advice. The purpose of such assistance was to improve marginal programs and raise the standard of performance of all projects on a continuing basis. It is important to note that these technical assistance services were entirely paid for by the federal government, and there was no penalty for asking for this help.

As the treatment system was being built, the federal government developed a companion national training network to upgrade the skills of persons working in federally funded treatment programs. The training programs were designed to help overcome the lack of trained professionals who had experience in treating addicts. Initially the system was a closed one in that only the federal project officers could decide who needed training; as the system matured, however, the programs themselves nominated trainees for the sessions.

During this period there were regular meetings between the state authorities and federal officials and between representatives of the larger treatment programs and federal officials. These discussions focused on ways to improve the training programs and methods of delivering high-quality services. The history of the building of a federal training capacity is chronicled in Davis and Ford (1980). Characteristically, this capacity was developed separately from the traditional health care training establishment and professional schools. Major efforts were made to accommodate non-traditional students and work settings within a structure that encouraged and rewarded efforts at skills training with the traditional incentives of academic institutions.

### **Governmental Reorganization**

In early 1973, the Office of Management and Budget (OMB) made the decision to incorporate OEO into the Department of Health, Education, and Welfare (HEW) by transferring its programs to the appropriate units within HEW. As a result, the drug and alcohol community programs of OEO were transferred to the Division of Narcotics Addiction and Drug Abuse within NIMH, a move accompanied by great stress on community programs and OEO staff. Part of the stress arose from the fact that the OEO criteria for funding and allowable costs were substantially different from the NIMH criteria. A further point of divergence related to staffing: whereas OEO programs encouraged employment of local citizens as a designed asset of the program, NIMH programs encouraged professional leadership and staff.

Moreover, NIMH drug abuse programs operated under strict performance guidelines, overhead limits, and accounting practices. As the OEO programs applied for continued funding within NIMH, they were required to meet these different standards or risk termination of the grant. Another stress point involved OEO agency personnel. In the transfer to NIMH these individuals lost their union contract protection and joined an agency with significantly different personnel criteria, procedures, and location. The resulting disruption was further compounded within the year when NIMH was reorganized and DNADA became the core of the new National Institute on Drug Abuse (NIDA).

Coincidental with the organizational upheaval, the new director of SAODAP, Dr. Robert DuPont, was named director of NIDA. Fortunately, the changes noted above did not signal a major shift of program emphasis. With all of these consolidations, the first year of the new National Institute on Drug Abuse was spent making both the programs and the personnel compatible. This activity was carried out in a period of waning budget increases for a system that was now beginning to mature.

### Management Procedures

All programs funded by NARA/NIMH had been required to conform to general rules concerning patient contact rates and to submit data periodically regarding patient demographics, services rendered, and program status. The data system was designed largely to produce management reports. Research projects were funded separately, as were studies of treatment outcome (see Sells, 1972). With the advent of SAODAP, the government began to provide much more specific guidance. A series of monographs were produced that offered community agencies specific guidance regarding program design, facility requirements, staffing patterns, treatment planning, and the applicable federal regulations. The monograph series covered central intake functions and the various treatment modalities: outpatient and residential methadone treatment and outpatient and residential drug-free

treatment (Special Action Office for Drug Abuse Prevention, 1974a, 1974b, 1974c, 1974d, 1974e).

An additional valuable management mechanism was the program matrix. Federal funds were awarded to serve a specific number of patients in a specified modality, and each modality was assigned a cost level and an annual patient flow. After an initial implementation period, usually 8 to 14 months, each program was required to function above a 90 percent utilization level of its budgeted matrix. Failure to achieve this goal resulted in a reduction of program size or of the amount of funding awarded in subsequent years. Overhead granted to specific administrative functions did not exceed 10 percent. This level of overhead was possible because NARA/NIMH and NIDA used a contract instead of the traditional grant in distributing funds. However, the contract procedure was changed in 1975 to a grant mechanism at the insistence of the Department of Health, Education, and Welfare.

In 1973, as a management strategy to utilize its limited personnel effectively and better supervise its extensive treatment network, NIDA consolidated dozens of individual project grants into statewide services contracts. This policy gave the state drug abuse agency the primary supervision duties for the drug treatment system. In addition, it enabled NIDA personnel to act as consultants to the states, concentrating on performance reviews (based on federal criteria) rather than serving as project officers on dozens of individual contracts, each of which required a separate review. The states welcomed this responsibility, but the new role aggravated a decades-old tension between the states and the cities. Many of the larger cities claimed that the states were deliberately unresponsive to their pressing needs for increased levels of drug abuse services. (This issue, having never been satisfactorily settled, erupted again recently during the passage of the Anti-Drug Abuse Act of 1988 with a public complaint by the mayors of many large cities that, because of the expansion of the block grant, their interests were not well served in the new bill.)

### The Ford Administration--A Turning Point

The issuance of a white paper on drug abuse in 1975 marked a turning point from increased federal presence to one of a steady maintenance of the system. In this role as head of the Domestic Council, Vice-President Nelson Rockefeller initiated a major review of policy and program priorities that attempted to set a new course for federal action after six years of emphasis on heroin addiction and the development of treatment capacity. This policy review incorporated the concepts of a relationship between alcohol and drug abuse and relative risk among the drugs of abuse, raising the issue of the need for more attention to prevention in future federal policy. The ideas of these discussions, however, were rendered moot by the outcome of the presidential election of 1976.

In 1975, a budget decision marked the beginning of a decline in federal support for treatment that was not reversed for more than a decade. Early in that year, NIDA had, at the direction of the Department of Health, Education and Welfare, converted the statewide services contract mechanism to a statewide services grant. The change loosened the control of the federal government on drug treatment management and was followed by a major reduction in the level of federal support within the grant structure. Because of a budgetary shortfall in fiscal year 1976, NIDA notified all grantees that there would be no cost-of-living adjustments and no new awards. It also announced a national review of all inpatient services and a tightening of policies regarding admission eligibility to federally-sponsored programs.

### CONSOLIDATION

Jimmy Carter's inauguration as president in 1977 brought a significant shift in the environment in which drug treatment issues were examined. The drug treatment system had been initiated in reaction to concern about crime. Therefore, as the system was built, the priority was rapid implementation of treatment capacity, with little

attention given to the relationship of drug abuse treatment to other components of the health care system. Many people saw drug treatment as an adjunct to the criminal justice system; others saw it as part of the social service system. The Carter administration framed the issues within the health care arena, but although drug treatment was not unimportant, it was not considered a high domestic priority. Therefore, resource levels during this era remained stagnant at a time when the rate of inflation in the health care system was accelerating dramatically. As a result, there was a retrenchment of programs, with the weaker organizations disappearing and a few agencies becoming stronger. In particular, agencies that did not have the corporate capacity to capture nonfederal funds were unable to continue delivering the kinds of services that were still required of federal grantees that were no longer being fully funded.

A period of program integration thus began. The states, when they were able, began to invest in drug treatment, although the proportion of federal support to the system continued to decline. As the statewide grant mechanism matured, the application of the program matrix became more difficult, direct technical assistance became less available, and federal involvement in the day-to-day management of programs was reduced. In addition, some of the data requirements were modified so that there was less information immediately available to the program managers in Washington. Increasingly, the state agencies found themselves depending on their own resources to solve problems.

This was also a period of transition at the National Institute on Drug Abuse. Robert Dupont, the founding director who had come from a clinical program background and had been part of the growth and establishment of the national treatment system, resigned. One year later his successor was determined: the Institute's research director, William Pollin, chosen principally for his strong record of research involvement in the neurosciences. His commitment to sustaining a federal role in services was minimal, and the emphasis within the Institute consequently shifted

operationally to research. This change in emphasis was encouraged by Secretary of Health and Human Services Joseph Califano and resulted in a shift of personnel throughout NIDA. It also started a reduction in the knowledge and information base for services, a trend that continued into the Reagan administration.

### Block Grants

With the installation of the Reagan administration in 1981, the states received a clear policy message: they were to have prime responsibility for all service systems; despite the actions of previous administrations, the federal government now assumed no special responsibility for drug treatment services. After a period of assessment, the proposal to initiate the block grant funding mechanism for alcohol, drug abuse, and mental health services was sent to Congress. Because the states had a decade of experience in managing the federal funds in drug treatment services, there were few protests raised against the block grant. However, there were concerns raised about the 25 percent reduction in funds for treatment services that was a key part of the proposal.

Soon after the passage of the block grant, the federal government stopped collecting baseline data on admissions to federally funded projects. Again, drug abuse activities became part of a major redefinition by the federal government of its role and responsibilities. These major program shifts also brought about personnel reductions at the National Institute on Drug Abuse. In December 1981, as part of a Public Health Service-wide reduction in force (RIF) and reduction in service, the National Institute on Drug Abuse removed from its rolls the personnel who had built, sustained, and supervised the national drug treatment service system. With this action, the Institute was stripped of the senior professional leadership to whom the states had historically turned for help in the solution of their drug treatment problems.

Initially, there was excitement at the state level with the freedom and independence of action given them by the block grant. Very shortly, however,

the state agencies discovered the difficulty of sustaining a service when there is no focused authority for the activity at the national level. Many changes occurred as a result of the decision not to include the federal government in drug treatment services. First, common data elements disappeared. Moreover, states gave drug treatment a lower priority than had been the case with the former federal commitment, producing less total revenue for the system. In many states a single administrative organization was established to handle both drug and alcohol treatment services and prevention.

By 1983 the states had begun to allocate more tax revenues to local treatment programs. Starting as early as 1984, there was strong advocacy by the states for the federal government to restore its leadership in the drug treatment endeavor. During this period, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and NIDA entered into a series of contracts and grants with the National Association of State Alcohol and Drug Abuse Directors to provide data and some of the services that had formerly been provided by federal agencies. This included the collection of data on sources of fiscal support for treatment and the collection of information on the patients being served by federally funded treatment programs.

In 1986, Congress added a new block grant for alcohol and drug treatment to the base alcohol, drug abuse, and mental health block grant. The appropriation of funds with that authority replaced the dollars that had been deleted when the block grant was passed in 1981. This restoration of funds was the first increase in treatment funding since the mid-1970s; however, the new legislation also raised some important issues regarding federal mandates placed on block grant funds. For example, while agreeing to the block grant approach, Congress was adamant on set-asides within it, thus injecting categorical support into this new funding mechanism.

In the 1988 Anti-Drug Abuse Act, Congress put a clearer categorical stamp on the initiatives by building in a mechanism for local communities to receive funds outside the block grant. This change

in approach is particularly important because ADAMHA and its institutes had earlier in the decade RIFed the expertise and infrastructure needed to review and award project grants properly. In addition, the 1988 legislation placed greater requirements on the states to adopt federally mandated priorities with the block grant monies. Today, the philosophical struggle between the executive and legislative branches of government is being fought directly within the drug treatment authorities. The Bush administration is interested in continuing the trend toward deregulation and greater freedom for the states. Congress is interested in having a greater voice in how local communities address the drug problem and has been much more responsive to special-interest constituencies within the addiction field. Women, high-risk youth, prevention, and specified programs have all been singled out and given special authorization by various committees. Stipulations in the Anti-Drug Abuse Act of 1988 specifying that "no less than X percent of block grant funds be spent" on a particular service or population actually total more than 100 percent of the funds; to comply with the law a significant proportion of program expenditures must meet at least two priority stipulations.

Because of the numerous changes inserted in the 1988 legislation, ADAMHA has not as yet issued definitive decisions as to the exact implementation rules. There is no doubt that the sections to address treatment waiting list problems provide ample authority to bypass the state drug abuse agencies and initiate individual project grants. The early decision was to allow both patterns while encouraging the states to be aggressive and prompt in applying for and spending the funds. Subsequently, ADAMHA seems to be having problems developing a new grant application and appears concerned about its ability to accept, review, award, and monitor local project grants. Therefore, the emphasis is on prompt action by the states.

The ability of the states to implement the new requirements of the 1988 legislation quickly and effectively will be an important factor in the short term in influencing the trend toward a more

categorical approach in federal legislation. If this new initiative is slowly or unevenly executed, it will again fuel the desire to return to a federally managed categorical grant program authority. When the additional block grant for alcohol and drug treatment was implemented after the 1986 anti-drug bill, there were such long delays in the money flow that congressional committees were skeptical of the ability of the treatment system to absorb additional funds in 1988. Some of the flexibility in the 1988 anti-drug bill is designed to bypass the slower acting states and allow communities to deal directly with the federal government. In fact, the long-term stability of the block grant is at stake with these new initiatives. Congressional interest in a return to categorical funding will intensify if the \$100 million for emergency expansion of the nation's treatment capacity is not distributed promptly.

## CONCLUSIONS

The tension between expectations and reality reinforces the continuing need to examine the federal role in funding drug abuse treatment. Assuming agreement that the federal government has a legitimate role in such funding, there remains the large question of how to execute that role. Several mechanisms have been used:

- contracts with service providers or community agencies,
- categorical grants to community providers or agencies,
- statewide contracts with specified subcontractors,
- statewide grants with specified grantees,
- cooperative agreements,
- statewide formula grants, and
- statewide block grants.

These mechanisms are listed in a sequence of descending federal control and ascending state management obligations. Direct contract and categorical grant programs demand a substantial federal work force of substantive experts and technical managers of contracts and grants. There are substantial demands on personnel for site visits to assure performance by the contractor or grantee and build relationships between the individual program and the federal program managers. With the 1981 advent of the block grant and the reduction in force that followed, the federal establishment is no longer capable of managing categorical grants or contract programs in drug abuse without first undergoing a period of rebuilding internal competence and personnel.

Because of limited personnel resources, the legislative mandate of the 1988 anti-drug bill to establish a national data system offering a national perspective on the size and performance of the drug treatment system is also being implemented slowly. Prior to the block grants, the federal government had more personnel assigned to data collection and analysis, and there is currently a critical need to rebuild this function.

A seminal issue for treatment professionals and program managers is the disparity between the need for experienced leadership at the federal level on treatment issues and the insufficiency of experienced, committed clinical personnel in the federal agencies who can play this role. ADAMHA leadership has emerged from the research and parent/advocacy group constituencies; NIDA's operational leadership has been largely research oriented since 1979.

The treatment needs of the nation and the requirements to effectively implement the mandates of the policy statements of the Anti-Drug Abuse Act of 1988 highlight the difficulty of maintaining an effective federal resource between perceived emergencies. Resource commitments to address drug abuse and addiction with solutions other than law enforcement erode during periods of relative public calm about these problems.

With another declared emergency situation and a legislative infusion of federal funds, federal executives need to devise and follow a strategy to ensure the sustained ability of the Public Health Service to provide leadership for the drug treatment services community. With the large numbers of dysfunctional drug abusers and addicts in our cities and states, the demand for more effective treatment can only increase in the near future. As critical and important as the federal role in research on drug abuse is, it is not the sole focus of the federal effort. As in the early 1970s, there is no alternative or substitute for federal leadership as a way to build and manage an effective treatment effort.

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#### REFERENCES

- Davis, C., and I.C. Ford (1980) *Preparing a Drug Abuse Workforce: A National Training System*. Washington, D.C.: Career Development, Center for Human Services.
- Densen-Gerber, J. (1973) *We Mainline Dreams*. Garden City, N.Y.: Doubleday & Company, Inc.

- Dole, V.P., and M. Nyswander (1965) A medical treatment of diacetylmorphine (heroin) addiction. *Journal of the American Medical Association* 193:646-650.
- Ehrlichman, J.D., E. Krogh, and J.H. Jaffe (1971) Special message to the Congress on drug abuse prevention and control, June 17. In *Public Papers of the President of the United States: Richard Nixon, 1971*. Washington, D.C.: U.S. Government Printing Office.
- Jaffe, J. (1970) Further experience with methadone. *International Journal of the Addictions* 5(3):386-387.
- Jaffe, J.H. (1978) Reminiscences of a drug czar. In W.R. Martin and H. Isbell, eds., *Drug Addiction and the U.S. Public Health Service: Proceedings of a Symposium Commemorating the 40th Anniversary of the Addiction Research Center at Lexington, Kentucky*. DHEW Pub. No. ADM 77-434. Washington, D.C.: U.S. Department of Health, Education and Welfare.
- Maddux, J.F. (1978) History of the hospital treatment programs, 1935-1974. In W.R. Martin and H. Isbell, eds., *Drug Addiction and the U.S. Public Health Service: Proceedings of a Symposium Commemorating the 40th Anniversary of the Addiction Research Center at Lexington, Kentucky*. DHEW Pub. No. ADM 77-434. Washington, D.C.: U.S. Department of Health, Education and Welfare.
- Martin, W.R. (1970) Commentary on the Second National Conference on Methadone Treatment. *International Journal of the Addictions* 5(3):545-551.
- Martin, W.R., and H. Isbell, eds. (1978) *Drug Addiction and the U.S. Public Health Service: Proceedings of a Symposium Commemorating the 40th Anniversary of the Addiction Research Center at Lexington, Kentucky*. DHEW Pub. No. ADM 77-434. Washington, D.C.: U.S. Department of Health, Education and Welfare.
- Meiselas, H. (1966) Narcotic addiction program of the New York Department of Mental Hygiene. In *Rehabilitating the Narcotic Addict*. Washington, D.C.: U.S. Department of Health, Education and Welfare.
- National Association for the Prevention of Addiction to Narcotics (1970) *Proceedings: Third National Conference in Methadone Maintenance*. Rockville, Md.: National Institute of Mental Health.
- National Association for the Prevention of Addiction to Narcotics (1972) *Proceedings: Fourth National Conference in Methadone Maintenance*. Rockville, Md.: National Institute of Mental Health.
- National Association for the Prevention of Addiction to Narcotics (1973) *Proceedings: Fifth National Conference in Methadone Maintenance*. Rockville, Md.: National Institute of Mental Health.
- Ramirez, E. (1966) Mental health program of the Commonwealth of Puerto Rico. In *Rehabilitating the Narcotic Addict*. Washington, D.C.: U.S. Department of Health, Education and Welfare.
- Sells, S.B. (1972) *The Effectiveness of Drug Abuse Treatment*, Vols. I-5. Cambridge, Mass.: Ballinger Publishing Co.
- Special Action Office for Drug Abuse Prevention (1974a) Central Intake Unit Manual. Series C, No. 1, February.
- Special Action Office for Drug Abuse Prevention (1974b) Drug Free Treatment Manual. Series C, No. 5, October.
- Special Action Office for Drug Abuse Prevention (1974c) Outpatient Drug Free Treatment Manual. Series C, No. 4, September.
- Special Action Office for Drug Abuse Prevention (1974d) Outpatient Methadone Treatment Manual. Series C, No. 2, August.

Special Action Office for Drug Abuse Prevention (1974e) Residential Methadone Treatment Manual. Series C, No. 3, August.

U.S. Department of Health, Education and Welfare (1966) *Rehabilitating the Narcotic Addict*. Washington, D.C.: U.S. Department of Health, Education and Welfare.

Wood, R.W. (1966) California rehabilitation center. In *Rehabilitating the Narcotic Addict*. Washington, D.C.: U.S. Department of Health, Education and Welfare.

Yablonski, L. (1965) *The Tunnel Back: Synanon*. New York: Macmillan and Company.

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#### APPENDIX: FEDERAL FUNDING POLICIES FROM 1967 TO 1980

Early in this period, these policies were the product of the National Institute of Mental Health and the Department of Health, Education, and Welfare. Starting with the President's executive order on June 17, 1971, until July of 1975, all funding policies were the product of the Special Action Office for Drug Abuse Prevention. From 1975 to the present, federal funding policies have evolved from the regular budget process involving the proposals and review between the Department of Health and Human Services and the Office of Management and Budget. Since 1981 and the advent of the block grant, federal funding policy has been the function of the congressional budget process.

#### 1967-1972

Narcotic Addict Rehabilitation Act program: 100 percent funding by the federal government including overhead for the contract care program. Limited to narcotic addicts committed by a federal district court to the care of the Surgeon General.

Community Mental Health Centers (CMHC) program: Authorized by P.L. 91-211 and P.L. 91-513; covers staffing costs only. Eight-year support with gradually diminishing rates of federal support: nonpoverty, 80 percent down to 30 percent; poverty, 90 percent down to 70 percent.

Office of Economic Opportunity programs: Community grants to provide care for alcoholics and drug addicts. Two main purposes: to treat alcoholism and addiction, and employ and train members of the community.

#### 1972

P.L. 92-255: Vastly expanded the authority and flexibility of federal support for community-based treatment. Section 410 permitted grants and contracts to cover all operational costs including overhead. SAODAP mandated the following mix on the site of treatment: 2 percent or less in a hospital-based program; 18 percent or less in residential-based programs; and 80 percent or more treated in outpatient programs. Three-year awards: nonpoverty, 80 percent down to 70 percent; poverty, 90 percent down to 80 percent.

#### 1973

SAODAP directive: All treatment grants converted to performance contracts. The concept of the treatment matrix and the requirement to maintain patient services at a certain percentage of total capacity became contractual requirements. There was an additional requirement that 10 percent of patients be referred from the criminal justice system.

#### 1974

With the Division of Community Assistance, the National Institute on Drug Abuse became operational. SAODAP directed other federally funded community treatment service grants to be transferred to NIDA, which received approximately \$40 million worth of projects and a

\$20 million increase in budget to fund and administer these projects. The task was to eliminate poorly performing programs and to consolidate duplicative programs. Also, NIDA reduced out-year funding on all programs. In the end, although programs were eliminated and consolidated, there were other impacts that appeared.

### 1975

At the insistence of DHEW, NIDA converted all statewide services contracts to statewide services grants. This move firmly placed the single state agency in charge of the treatment system management. States could request new awards of grants at the following federal support levels:

year 1 -- federal, 80 percent, and state, 20 percent;

year 2 -- federal, 50 percent, and state, 50 percent;

year 3 -- federal, 20 percent, and state, 80 percent.

In July 1975, the shortfall in the FY 1976 budget was made public, leading to NIDA policies of no cost-of-living adjustments, no new awards, review of the need for inpatient "slows" (no inpatient support permitted), and reaffirmation of the need to serve the addicted and the criminal justice system.

In September 1976, federal funding policy revisions were announced: federal funding would be reduced to a flat 60 percent, a policy that included administrative costs; poverty areas would continue to have a benefit. No new poverty areas would be designated. The 1975 amendments to the CMHC authority funding would be limited to two years unless all requirements of the law were

met. (Drug grants chose to become part of the statewide grant rather than comply with the CMHC legislation.) Eight-year project grants were brought into compliance with the first policy noted above.

### 1977

NIDA made further treatment slot cost adjustments.

### 1978

All outreach and central intake services were eliminated from any federal support.

### 1979

NIDA permitted a reduction -- from 95,000 to 84,000 -- in the number of federally supported treatment slots. These funding policies remained in effect until the block grant era began in 1981.

TABLE A-1 Treatment Slot Costs Designated by SAODAP and NIDA, 1972-1981

Type	FY 72	FY 73-76	FY 77	FY 78	FY 79	FY 80-81
Inpatient	30,000	36,000	40,000	Elim.	--	--
Residential	4,200	4,400	5,150	5,400	5,670	5,840
Outpatient	1,500	1,500	1,750	1,850	1,940	2,000
Day care	--	--	2,370	2,500	2,620	2,700
Residential detox	--	--	--	--	15,000	15,450

## **DRUG TREATMENT IN STATE PRISONS**

***Gregory P. Falkin, Harry K. Wexler, and Douglas S. Lipton***

Since the 1970s, when retribution replaced rehabilitation as the dominant sentencing philosophy, prison populations have climbed dramatically while crime has continued unabated. The public outcry against sharply rising crime rates during the early 1970s led politicians to call for more certain and severe sentences. A strong belief that corrections could not rehabilitate offenders was fueled by research studies that essentially concluded that "nothing works" (Lipton et al., 1975; Martinson, 1974). As rehabilitation fell into disfavor, determinant sentencing and persistent felony offender laws were enacted. Legislators also responded to the alarming increase in drug abuse during the 1980s by mandating tougher sentences against drug dealers and users. As a result of the new sentencing laws, the nation's prisons became full of serious drug-abusing offenders, many of them recidivists. Looking for ways to reduce recidivism and control overcrowding (and recognizing the close connection between substance abuse and crime), correctional authorities have begun expanding prison-based drug treatment programs during the past few years. In contrast to the viewpoint that nothing works in rehabilitation, the efficacy of a policy of expanding drug treatment for prisoners and parolees can now be supported by social science research.

Indeed, there is sufficient scientific evidence to demonstrate that certain types of prison-based drug treatment (e.g., therapeutic communities) meet this need, while sentencing policy during the last decade has led to a tremendous expansion of prison capacity without a commensurate decline in crime. Although this policy may be supported on the basis of "just deserts" for criminals, it is evident that incarceration is not adequate either as a deterrent or as a means of controlling recidivism. The majority of inmates, especially the most serious among them, have severe lifestyle

problems manifested most significantly by chronic substance abuse. Without appropriate treatment while in prison, a high percentage will relapse to drug use after release and will recidivate. The fundamental issue, then, is whether there are any forms of treatment that can reduce the likelihood of offenders recidivating. There is enough evidence currently to demonstrate that high-rate offenders with chronic polydrug abuse problems can be treated effectively.

Our conclusion, based on the available scientific evidence and our best professional judgment of what works, is that drug treatment in correctional settings can curb recidivism provided the programs have the following central features: (1) a competent and committed staff, (2) the support of correctional authorities, (3) adequate resources, (4) a comprehensive, intensive course of therapy aimed at affecting the lifestyle of clients beyond their substance abuse problem, and (5) continuity of care after inmates are paroled. In the absence of any of these features, it would be difficult to expect a drug treatment program to substantially reduce recidivism. Given the current array of treatment programs (many offering only occasional counseling, drug education, or other limited services), the finding of evaluation research that many programs are ineffective is not surprising. To adjudge that drug treatment is unable to control recidivism because many programs do not is to miss the crucial point that some programs have been quite successful. With the proper program elements in place, treatment programs could achieve a significantly greater reduction in recidivism than by continuing a policy of imprisonment without adequate treatment. This conclusion is, of course, tempered by the fact that only a limited number of programs have been scientifically demonstrated to be effective. This finding compels us to call for further research as treatment programs are implemented in correctional settings.

Because there is still considerable opposition to rehabilitation in any form, this paper next assesses

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the validity of the arguments against expanding drug treatment in corrections. The justification for treating prisoners and parolees rests primarily on the fact that there is a high correlation between drug abuse and crime and that certain types of treatment have been found to be effective in controlling relapse to drug use and recidivism. Each of these issues is discussed in subsequent sections. Based on an assessment of what works and what does not work in drug treatment, there are several guidelines we recommend following in establishing prison-based and aftercare drug treatment programs for offenders.

### **OPPOSITION TO PRISON-BASED DRUG TREATMENT: A RESPONSE**

Although the number of prison-based drug treatment programs has increased during the past few years, there is still considerable opposition to them. Funds for prison construction and maintenance have clearly been given priority over funds for treatment. Policymakers who are against expanding drug treatment programs for convicted felons rest their case on several arguments: rehabilitation programs treat criminals too leniently; the public wants more criminals punished rather than more rehabilitation programs; and rehabilitation programs cost too much and do not work. Prisons, many contend, deter criminals and ensure that they receive their just deserts. Each of these arguments warrants serious consideration. To best understand the basis of these beliefs and their implications for drug treatment, a brief explanation of their origin is required.

#### **The Belief That "Nothing Works" in Rehabilitation**

Perhaps the most important point to note is that much of the opposition to drug treatment for offenders stems from an opposition to correctional rehabilitation in general. During the mid-1970s, after a decade of social strife (antiwar demonstrations, prison riots, rising crime rates, drugs being used openly and their benefits

popularly espoused), a consensus developed that reforms needed to be made in criminal justice (Cullen and Gendreau, 1989). The time had come for a social shift from turbulent conditions and libertine lifestyles to greater social order and morality. Indeterminant sentencing, the centerpiece of the rehabilitation philosophy for decades, became the target of both conservatives and liberals. They shared the view that prisons did not rehabilitate and found support for their beliefs in contemporary scientific research.

Conservatives by and large perceived the problem as a lack of law and order in society. Their rhetoric focused on sharply rising crime rates, and the solution they sought was to "get tough" with criminals. Determinant sentencing and related policies, such as mandatory minimum sentencing, selective incapacitation, and the abolition of parole, would, in their view, control crime and ensure just deserts. Liberals in the main were disheartened with perceived social injustices and felt that indeterminant sentencing was causing gross inequities. Prisons were seen as "factories of crime" and not places of reform. Determinant sentencing in general, and sentencing and parole guidelines in particular--policies based on the "justice model"--would, according to the liberal prescription, ensure fairness and eliminate the abuses of discretionary authority. Thus, for different reasons and with different reforms in mind, a consensus emerged that rehabilitation was no longer a primary function of the postadjudicatory system.

The rhetoric against rehabilitation was bolstered by the fact that opponents of rehabilitation were able to corroborate their deeply held beliefs with scientific research findings. In 1974, Robert Martinson published a highly influential article in *The Public Interest* entitled "What Works?--Questions and Answers About Prison Reform." His central conclusion was that "[w]ith few and isolated exceptions, the rehabilitative efforts that have been reported so far have no appreciable effect on recidivism" (1974:25). The phrase, "nothing works," was thus coined and became an accepted part of the corrections

vocabulary; it was treated as fact. The belief that "nothing works" still has widespread acceptance and is one of the main reasons drug treatment programs are given low priority despite high recidivism rates, especially among drug-abusing offenders. But how true is it that "nothing works?"

Martinson's article was a more widely read popularization of a scholarly assessment of the outcomes of 30 years of rehabilitation efforts for criminal offenders, a project directed by Douglas Lipton in which Martinson participated. The basic conclusion of their book, *The Effectiveness of Correctional Treatment*, was that "the field of corrections has not as yet found satisfactory ways to reduce recidivism by significant amounts" (Lipton et al., 1975:627). Other authors reviewing evaluation studies of rehabilitation programs came to essentially the same conclusion (Bailey, 1966). Few people who espoused the view that nothing works questioned the validity of the research on which it was based or understood the problems inherent in the design of most treatment programs and in the methodologies used to evaluate them. They also did not recognize the difference between Martinson's pessimistic viewpoint and the more guarded conclusion of Lipton and colleagues, which left open the possibility that rehabilitation could work.

So influential were the research findings in the policy debate about sentencing reform and rehabilitation that they became the subject of a scholarly assessment by the National Academy of Sciences. In its report, *The Rehabilitation of Criminal Offenders*, the Academy tempered the assessment that nothing works by stating that "we do not now know of any program or method of rehabilitation that could be guaranteed to reduce the criminal activity of released offenders" (Sechrest et al., 1979:3). Rather, it raised the question of whether some programs might work for certain types of offenders. Since that time, a growing body of evaluation studies has come under careful scrutiny, and several authors have concluded that certain rehabilitation programs effectively reduce recidivism (Gendreau, 1981;

Gendreau and Ross, 1979, 1983-1984, 1987; Greenwood and Zimring, 1985; Palmer, 1975; Van Voorhis, 1987).

Ironically, a few years after publishing his "What Works?" article, Martinson revised his conclusion, based on further review of the research, in which he found that "some treatment programs do have an appreciable effect on recidivism" (1979:244). As Cullen and Gendreau state, "the doctrine of nothing works is best seen not as an established scientific truth, but as a socially constructed reality" (1989:30). Just the same, the generalized belief that nothing works has been, as we suggested earlier, a major factor in the reluctance of many policymakers to support prison-based drug treatment.

Accordingly, we later present a detailed review of the evaluation research on drug treatment programs for offenders, focusing on what has been found to work. This research, all of it conducted since the studies reported by Lipton and coworkers, demonstrates that there are promising approaches to the treatment of drug-abusing offenders. In fact, a major outcome evaluation study conducted during the 1980s by Lipton and the present authors (Wexler et al., 1988b) demonstrates that the prison-based therapeutic community is a highly effective modality; this research in particular (summarized below) illustrates the profound changes that have taken place since the earlier assessment of rehabilitation. Indeed, there is sufficient scientific evidence for us to conclude that there are now, to quote the earlier statement of Lipton and associates, "satisfactory ways to reduce recidivism by significant amounts."

### **Belief in Imprisonment**

The belief that nothing works is, as the evaluation literature demonstrates, a misconception. Just the same, it is often used to justify a policy of imprisonment for convicted felons. For many, this policy is based on a retributive ideology, which stems fundamentally from a desire to see offenders receive their just deserts. Policymakers who support imprisonment usually believe that the

public wants offenders punished and that supporting treatment would be a show of leniency.

This belief is supported by the argument that incarceration is the most, perhaps the only, effective means of controlling crime. Imprisonment, it is thought, will keep criminals off the streets (the incapacitation argument) and prevent them from recidivating afterwards (individual deterrence); in addition, others will refrain from crime, fearing the consequences (general deterrence). Because longer and more certain sentences lead to increases in prison populations and because court orders limit overcrowding, more prisons must be built. Thus, resources should be allocated for prison construction, not treatment programs.

Our basic response to these beliefs is that support for drug treatment programs is consistent with the goals of a policy of incarceration. In other words, offenders can be punished and society protected by placing them in drug treatment programs while they are in prison and on parole. Indeed, to alter the criminal proclivities of some offenders, it may be necessary for them to both serve a term in prison and receive treatment for their substance abuse. Furthermore, the fact that recidivism rates continue to be high gives one reason to question the belief that incarceration is an effective deterrent. Thus, the issue is whether drug treatment programs for prisoners and parolees can reduce recidivism better than the current practice, which limits treatment. Because of the high correlation between drug abuse and recidivism, we believe it is in the public interest to place offenders in the kinds of prison-based and community treatment programs that have been found to be effective.

During the past decade, the number of inmates in the nation's prisons doubled, approaching nearly three-quarters of a million. The vast majority (more than 80 percent) are recidivists; about three-quarters previously used drugs (Innes, 1988). Many of these prisoners have severe substance abuse problems. Indeed, about one-third of the inmates previously used a major drug (heroin,

methadone, cocaine, LSD [lysergic acid diethylamide], PCP [phencyclidine]) on a regular basis; more than half reported using drugs during the month prior to committing the crime for which they were incarcerated (Innes, 1988). Slightly more than half were under the influence of alcohol or drugs, or both, at the time of the offense for which they were incarcerated. Some of these inmates are predatory criminals with severe substance abuse problems; they are responsible for an extraordinary amount of crime and are involved in a variety of violent crimes, property offenses and drug deals.

Indeed, the extensive research on the relationship between drug abuse and crime (summarized in the next part of this paper) provides convincing evidence that a relatively few severe substance abusers are responsible for an extraordinary proportion of crime (Gropper, 1985, based on the work of Johnson et al., 1985; Ball et al., 1983; and Inciardi, 1979). Because of the seriousness of their crimes and their criminal records, many of these drug-abusing offenders are incarcerated; therefore, a logical, cost-effective, and convenient point of intervention is while they are in prison and on parole.

Without treatment in prison, a high percentage will relapse to drug use after release and will return to crime. These behaviors are part of a lifestyle that is both highly destructive and resistant to change. In fact, about one-quarter of the drug users in prison were previously in treatment (Bureau of Justice Statistics, 1983). There is, however, enough evidence (described later) to demonstrate that even the most severe offenders, that is, career criminals with chronic polydrug abuse problems, can be effectively treated. Yet despite this evidence, corrections has, for the most part, made limited attempts to institute programs aimed at treating substance abusers in prison and on parole.

Some legislators oppose drug treatment in prisons because they believe that correctional officials do not want these programs in their institutions. Although there are some wardens who do not believe in treating inmates with drug abuse

problems, the issue is really more a matter of priorities. Currently, the overriding concern of correctional authorities is to ensure that they have adequate space to house inmates. Their budgetary needs reflect a priority for additional prison space over rehabilitation programs. In some cases, correctional officials may also be in conflict among themselves as to where to treat offenders; that is, they may disagree over whether resources should be allocated to community-based or prison-based programs. Furthermore, prison administrators may sometimes feel that prison-based treatment programs make it more difficult for them to manage inmate housing. (This problem occurs when they dedicate a separate housing unit to the program in an attempt to separate general population inmates from program residents.) Although correctional officials do have legitimate concerns about the priority of prison-based drug treatment programs, we believe they are more than offset by the programs' advantages.

In addition to their effect on recidivism, the major benefit of prison-based drug treatment programs is that they enhance security in institutions. Drug use and drug dealing (which are rampant in many prisons) decline with the introduction of drug treatment programs and random urinalysis testing (Vigdal and Stadler, 1989). Infractions of prison rules as well as violence and threats of violence also decline, and the danger of prison riots is reduced. In fact, there have been instances in which inmate leaders in drug treatment programs quelled disturbances that could have led to rioting. Correctional authorities evidently recognize the value of treating prisoners for their drug abuse and have given it increasing priority during the past decade. Between 1979 and 1987, the percentage of inmates in some form of treatment tripled.

Many policymakers, especially legislators, oppose funding for prison-based drug treatment programs because they believe that the public wants offenders punished and that treatment programs coddle criminals. Although it is true that Americans want criminals punished and that there has been a substantial decline in public support for rehabilitation since the late 1960s, Cullen and

Gendreau (1988) provide evidence that "support for rehabilitation remains surprisingly strong." For example, although only 12 percent of Michigan policymakers assumed that citizens favored prison rehabilitation, 66 percent of the public believed rehabilitation should be a primary goal of prisons (cited in Cullen and Gendreau, 1988). This is not an isolated finding; Cullen and Gendreau note several other national and state surveys that show that the public still believes in prison rehabilitation. According to a study commissioned by the Edna McConnell Clark Foundation, citizens want "assurances of safety much more than they want assurances of punishment," and they "want prisons to promote rehabilitation as a long-term means of controlling crime" (Public Agenda Foundation, 1987:5; cited in Cullen and Gendreau, 1988). As we conclude from the evidence on the relationship between drug use and crime and the existence of effective treatment programs (described in the next two parts of this paper) prison-based drug treatment is essential as a means of protecting society. Furthermore, good drug treatment programs do not coddle criminals; residents usually find these programs quite demanding because of the profound changes in attitudes and behaviors they require.

## THE NEED FOR DRUG TREATMENT IN PRISONS

Although a small percentage of the nation's prisoners receive drug treatment, there is still a considerable need for effective treatment programs. Estimates by social science researchers and correctional authorities indicate that as much as 70 to 80 percent of the nation's prisoners used drugs prior to incarceration; however, only about 10 percent are in prison-based treatment programs (Chaiken, 1989; Innes, 1988). Drug-dependent offenders are responsible for a substantial, indeed disproportionate amount of crime in comparison with offenders who do not use drugs. Studies of serious substance abusers, in particular, offenders who use heroin and cocaine, show that they have extremely high crime rates. As the extent of abuse increases, the frequency and severity of their

crimes escalate. Furthermore, many of these drug users are also involved in drug dealing, an enterprise that also has an attendant effect on other forms of crime, especially crimes of violence. A review of the empirical studies of the association between drug use and crime provides an appreciation of the enormous impact of drug abuse on crime.

### The Relationship Between Drug Use and Crime

Numerous studies consistently report exceedingly high crime rates among substance abusers, especially heroin and cocaine abusers. Although cocaine and crack use have increased dramatically in the past few years and many prisoners are dependent on these drugs, only a few research studies of the relationship between crack and crime have been completed. Thus, the following discussion focuses primarily on the connection between heroin use and crime, highlighting the effects of cocaine and crack use where research evidence is available. Inciardi (1979) has reported that active heroin users commit an average of 423 crimes per arrest. Johnson and colleagues report that the average heroin abuser in New York City commits more than 1,000 crimes (including crimes for money, drug dealing, and minor offenses such as shoplifting) per year (1985:77). During periods of daily heroin use, the average offender commits 100 to 300 crimes a year, including robbery and a variety of property crimes (Johnson et al., 1985). Such users commit thousands of crimes during their drug abuse careers, according to studies in New York, Miami, Baltimore, California, Michigan, and Texas (Chaiken, 1986; Johnson et al., 1985).

Not only do drug-dependent offenders commit a substantial amount of crime, but as the frequency of abuse increases, so does the frequency of crime (Ball, 1986; Ball et al., 1981; Chaiken and Chaiken, 1983; Johnson et al., 1985; McGlothlin et al., 1977). During times when offenders use heroin or cocaine daily, they commit two to six times as much crime as when they use these drugs less frequently (Ball et al., 1982; Speckart and Anglin, 1986). Ball and coworkers (1981) found

that daily heroin users commit more than six times as much crime as offenders who use heroin less than daily. In this study, daily heroin abusers reported an average of 248 "crime-days" (24-hour periods in which an individual commits one or more crimes) per year at risk, whereas nondaily users reported only 40.8 crime-days per year at risk. Similarly, Johnson and associates (1985) reported that daily heroin users (six or seven days per week) claimed an average of about 1,400 crimes (including crimes for money, drug dealing, and minor offenses such as shoplifting) per year; however, regular heroin users (three to five days per week) committed about 1,200 crimes, and irregular users (one or two days per week) committed only about 500 crimes. Research on the relationship between crime and cocaine use demonstrates that, as the frequency of cocaine use increases, criminal activity also increases (Collins et al., 1985; Hunt et al. 1986).

As the frequency of drug use increases, the severity of the crimes committed also increases. Criminal income is approximately \$55,000 annually during periods of daily cocaine or heroin use, but it is less than half as much during periods of less regular use (Collins et al., 1985; Johnson et al., 1985; Speckart and Anglin, 1986). The most serious crimes (robbery, burglary, aggravated assault) are common during daily cocaine or heroin use but rare during periods of nondaily use (Ball et al., 1983; Chaiken and Chaiken, 1982; Hunt et al., 1984; Speckart and Anglin, 1986). A study of career criminals found that a majority of the most violent criminals were heroin users, and most of these were daily users with high-cost heroin habits (more than \$50 per day; Chaiken, 1986). Crack abusers appear to commit an equal if not greater number of crimes than heroin abusers. Whereas heroin abusers tend to commit more property crimes (e.g., burglary, larceny), crack abuse seems to have accelerated the rates of violence, drug dealing, and sexual crimes, as well as robbery (Goldstein et al., 1989, 1990; Johnson et al., in press).

In addition to property crimes and crimes of violence, drug-dependent offenders are also

heavily involved in drug dealing. Estimates range from 100 to more over 1,000 drug distribution crimes per year, depending on the location and type of heroin abuser studied. Chaiken and Chaiken (1982) found that their sample of incarcerated felons claimed 90 to 160 drug sales per year. Johnson and colleagues (1985) report that daily heroin users commit about 1,000 drug distribution crimes each year. In addition to direct sales of drugs, illegal drug distribution activities include directing customers to dealers ("steering"), recruiting customers for dealers ("touting"), and buying drugs for customers ("copping").

Involvement in drug dealing perpetuates criminal activity of all sorts. Drug dealing and drug use often involve violence, as reported in the ethnographic work of Goldstein (1985, 1989). According to Goldstein, violence and threats are utilized to enforce and maintain smooth operations of the drug distribution system. Lower level dealers are controlled by threats of violence, and upper level distributors are often targets for violent "rip-offs" by drug users and dealers. Statistical reports indicate that 20 to 30 percent of homicides are drug related (McBride, 1981; New York City Police Department, 1983). Estimates in 1988 are that more than 50 percent of New York City's homicides are drug related (Goldstein et al., 1989).

The prevalence of drugs and alcohol in criminal populations has recently been studied. Wish and associates pioneered the use of urinalysis in a series of studies of male arrestees in New York City to reveal the presence of illegal drugs at the time of arrest (Wish et al., 1984). (It is assumed that most of the arrests occurred shortly after the crime.) They found that 80 percent of arrestees charged primarily with serious nondrug crimes tested positive for one or more drugs (primarily cocaine and heroin). This basic finding has been replicated in 12 large cities that participate in the National Institute of Justice's Drug Use Forecasting (DUF) system (1988). Between April and June 1988, 50 percent or more of male arrestees in 10 of the cities tested positive for one or more drugs (excluding marijuana). In New

York City, 83 percent tested positive for cocaine, and 27 percent tested positive for heroin.

Several other studies have provided information on the actual utility of drugs in criminal activity among samples of hard drug users (Goldstein et al., 1990; Strug et al., 1984). Large amounts of alcohol, cocaine, and heroin are often ingested by criminals before and after a crime to reduce their anxiety and enhance their courage. The proceeds from the crime are then used to obtain additional drugs and alcohol.

### Assessing the Drug-Crime Connection from a Treatment Perspective

Although the relationship between drug use and crime illustrates the need for prison-based treatment, the precise nature of causality is more of theoretical interest than of practical value as far as treatment is concerned. In other words, one does not have to debate whether crimes are committed because of the pharmacological properties of drugs or whether they are economically motivated (to finance drug habits or to enhance power in the drug distribution system). The important point is that, for many prisoners, both crime and substance abuse (including alcohol as well as illicit drugs) are inextricably tied into a lifestyle characterized by hedonistic, self-destructive, and antisocial behaviors.

The most significant manifestation of this lifestyle is polydrug use (but it also includes problems related to poor interpersonal skills, a lack of job skills, dependency on others, and frequent conflict with criminal justice authorities). The use of expensive drugs (heroin and cocaine, in particular) is highly related to crime; discerning whether the use of other substances (such as PCP, marijuana, and alcohol) causes crime is less important than understanding that for many offenders the use of these substances is also part of an antisocial lifestyle, which often involves polydrug use (Collins et al., 1985).

Although a large proportion of the nation's prisoners lead a lifestyle associated with problems

of drug abuse, only a small percentage receive treatment while in prison. Few of these programs, however, are intensive enough to have a significant effect on relapse and recidivism (most programs offer only drug education, Alcoholics Anonymous meetings, occasional counseling, or other limited services). Without effective treatment for their drug use and related lifestyle problems, the likelihood that they will recidivate is quite high. Can treating them in prison reduce their criminality after they return to the community? As the next section demonstrates, there is enough evidence that drug treatment is an effective means of controlling recidivism and that intensive programs such as therapeutic communities are well suited to serious drug abusers in prisons.

### EVALUATION RESEARCH ON PRISON-BASED AND COMMUNITY DRUG TREATMENT PROGRAMS

Although there are a variety of treatment modalities (e.g., methadone maintenance, residential drug-free programs, outpatient counseling), not all programs are relevant for prisoners and parolees. Because serious offenders generally require intensive drug treatment and methadone maintenance is neither relevant to the treatment of cocaine addiction nor available in prisons (see Magura et al., 1989, which discusses a jail-based methadone program), this part of the paper reviews only outcome evaluation studies of the residential drug-free modality. A fairly exhaustive search of the published literature on prison-based drug treatment reveals only a limited number of evaluation studies. Accordingly, the research conducted in a few of the more notable prison-based programs is described in detail, following which the research on community-based programs is reviewed.

Although only a small percentage of the clients in residential programs have entered treatment after prison--most admissions are made either on a voluntary basis or as a condition of probation--evaluations of these programs give insight into the types of treatment that are likely to

be effective in prison and aftercare programs. (Because the focus here is on postadjudicatory treatment, studies of diversion programs, such as Treatment Alternatives to Street Crime, or TASC, and other alternatives to incarceration, such as intensive probation supervision, are not reviewed.) Because drug treatment programs for offenders may be based on different models (e.g., self-help, addiction as a disease) and may include a variety of program components (e.g., counseling, drug education, confrontation groups), the section below discusses specific approaches, both successful and unsuccessful, in the treatment of offenders.

#### Prison-Based Drug Treatment Programs

Despite many obstacles to prison rehabilitation, some efforts have been made to treat substance abusers while they are in prison. Although there is a paucity of information about the extent of prison drug treatment programs in the United States, some indications about the extent and quality of these programs are available. In 1979 the National Institute on Drug Abuse (NIDA) conducted a comprehensive survey of drug abuse treatment programs in prisons (NIDA, 1981). The survey identified 160 prison treatment programs serving about 10,000 inmates (4 percent of the prison population). In 1979, 49 programs (32 percent of all programs) were based on the therapeutic community model. They served about 4,200 participants (or 42 percent of all participants). Chaiken estimated that, in 1987, 11.1 percent of the inmates in the 50 states were in drug treatment programs (Chaiken, 1989). Although this figure represents a sizable increase (from 10,500 inmates in 1979 to 51,500 inmates in 1987), the vast majority of inmates with substance abuse problems still do not receive treatment while in prison.

Although a number of therapeutic communities (TCs) within prison settings have been established in state and federal prisons, relatively few outcome research studies have been conducted (NIDA, 1981). Accordingly, this section presents the existing literature on evaluations of prison-based drug treatment programs, focusing primarily on

recidivism outcomes. First, our own research on the Stay'n Out program in New York State is described in detail. Then, evaluations of several other prison-based programs (the Cornerstone, Simon Fraser University, Wharton Tract Narcotics Treatment, and Terminal Island treatment programs) are summarized.

### Stay'n Out:

The Stay'n Out program is a therapeutic community for the treatment of incarcerated drug offenders that has been identified as a national model (see the REFORM newsletter published in 1988 by the New York-based Narcotic and Drug Research, Inc.). Stay'n Out began as a joint effort of the New York State Division of Substance Abuse Services (DSAS), which funded the program during its first years; New York Therapeutic Communities, which operates it; the New York State Department of Correctional Services (DOCS), which currently funds it; and the New York State Division of Parole. It has two sites: a program for male offenders established in 1977 at the New York State Arthur Kill Correctional Facility on Staten Island, and a treatment program for females, opened in 1978 at the Bayview Correctional Facility in Manhattan. Currently, there are three treatment units at the Arthur Kill Correctional Facility with about 35 beds per unit (a total capacity of 146 beds) and one treatment unit at the Bayview Correctional Facility, with 40 beds.

In 1984 the National Institute on Drug Abuse provided a grant to Narcotic and Drug Research, Inc., to evaluate Stay'n Out and compare it to other prison drug abuse treatment programs. The evaluation was designed to test the proposition that effective treatment of substance abusers is possible within prison (Wexler et al., 1988b, 1990). A large-scale, quantitative analysis was conducted relating several measures of treatment outcome (e.g., rearrest, reincarceration) to both client characteristics and program attributes (time in program and termination status). The study included males and females as well as treatment and no-treatment comparison groups. Statistical

analyses were performed to test several hypotheses about the effectiveness of Stay'n Out treatment. The two main ones were that the Stay'n Out therapeutic community is more effective than no treatment or than alternative prison-based drug treatment modalities in reducing recidivism, and that increases in time in the program are related to reductions in recidivism. These two hypotheses were by and large confirmed, with the main finding being that, as time in therapeutic community treatment increases, recidivism declines significantly.

Since the program began, nearly 1,000 males and more than 500 females have been admitted to treatment. The aim of the program is to treat felony offenders for their drug abuse and related problems so that they are less likely to recidivate after leaving prison. Inmates selected for the programs are recruited at state correctional facilities; they must show an official history of drug abuse (or indication of involvement in the drug culture); be at least 18 years of age; have evidence of positive institutional participation; show no history of extensive violence, arson, sex crimes, or mental illness; and be no more than 12 months nor less than 6 months away from their first parole hearing. The expected minimum treatment period is from 6 to 9 months.

On average, male clients in the Stay'n Out program have previously been convicted four times and have been incarcerated for four years (prior to admission into Stay'n Out). Most of the offenders are in prison for robbery (43 percent), drug sales (18 percent), or burglary (18 percent). The Stay'n Out program admits drug abusers who have been heavily involved in drug use since the mean age of 16½. Seventy-three percent of the clients have abused opiates; 77 percent have abused cocaine (and other stimulants). Their previous attempts at changing their lifestyle have failed. On average, they have previously been in two treatment programs for 18 months combined.

The programs at Arthur Kill and Bayview are therapeutic communities modified to fit into a correctional institution (see Wexler and Williams,

1986 for a full description of the program). During the early phase of treatment, the major clinical thrust involves observation and assessment of client needs and problem areas. Orientation to prison therapeutic community procedures is provided through individual counseling, encounter sessions, and seminars. At the outset, clients are given low-level jobs and granted little status. During the latter phases of the recovery process, residents are given opportunities to earn higher level positions and increased status through sincere involvement in the program and hard work. Encounter groups and counseling sessions explore issues in greater depth and focus on the areas of self-discipline, self-worth, self-awareness, respect for authority, and acceptance of guidance for problem areas. Seminars take on a more intellectual quality. Debate is encouraged to enhance self-expression and to increase self-confidence.

Stay'n Out clients are housed in units segregated from the general prison population. They eat in a common dining room, however, and attend morning activities with the other prisoners. Most program staff are former addicts who are graduates of community-based therapeutic communities as well as ex-offenders. They act as role models demonstrating successful rehabilitation. All but one of the units are staffed by a unit director and three counselors; one unit at Arthur Kill has only two counselors. Support is provided by the administrative staff of New York Therapeutic Communities.

Upon release, participants are encouraged to seek further substance abuse treatment at cooperating community-based TCs. About half of program graduates actually continue in residential programs. Extensive involvement with a network of such community TCs is thus central to the program's operation. Staff and upper level residents of community TCs visit Stay'n Out on a regular basis to recruit resident inmates for their programs. As ex-addicts and ex-felons who are leading productive lives, these visitors act as role models and provide inspiration to those in earlier stages of recovery.

The evaluation research design compared the Stay'n Out male TC treatment group ( $N = 435$ ) and the female TC group ( $N = 247$ ) with no-treatment control and alternative treatment groups. The male treatment group was compared with a no-treatment control group ( $N = 159$ ) that consisted of inmates who were on a waiting list for the program. They met all the criteria for admission except the parole time eligibility criterion and therefore completed their prison term without treatment. The male TC group was also compared with a milieu treatment group ( $N = 576$ ), a residential treatment program that offered a less intensive treatment regimen than the TC (i.e., time was less structured, there was no hierarchy of jobs or social roles, counselors were not ex-addicts or ex-offenders but trained correctional officers, good conduct in the program was not rewarded with greater responsibility, and interaction with community TCs was less extensive). In addition, the male TC group was compared with a counseling group ( $N = 261$ ), that received only individual and group counseling once a week. The female TC group was compared with a no-treatment control group ( $N = 38$ ) and a counseling treatment group ( $N = 113$ ); these groups were similar to their male counterparts (i.e., the control group met the basic criteria for admission but did not receive treatment, and the alternative treatment group received only counseling services).

In general, the background characteristics of the samples were comparable, except that the male milieu group had a significantly higher mean age and criminal history score (a weighted average of prior criminal arrests, convictions, and sentences) and had spent more time in prison than the other male groups. Multivariate statistical analyses were performed to control for the possible confounding effects of these differences on treatment outcomes. The groups were compared according to several recidivism measures: the percentage arrested, the mean number of months until arrest, the percentage positively discharged from parole, and the percentage not reincarcerated. The sampling time frame was based on inmates released from prison between 1977 and 1984; therefore, the follow-up period (which ended in 1986) ranged

from two to nine years, depending on the year prisoners were released.

Statistical analyses were performed to compare the effectiveness of TC treatment with alternative interventions and no treatment and to assess the relationship between treatment outcomes and time in treatment. The across-group comparisons yielded mixed results (i.e., when compared with the other groups, the TC groups had significantly lower arrest rates but differences in other outcome variables were not significant); however, the most powerful finding was that there was a consistent and significant correlation between treatment outcomes and time in the program. The failure to find significant differences between the TC group and comparison groups for some of the outcome variables stems from the fact that average treatment effects mask the differential impact of time in treatment within the groups. Indeed, the Stay'n Out evaluation research, like other TC evaluation research, consistently found statistically significant and salient effects between time in the program and treatment outcomes.

As Figures 1a and 1b show, male and female Stay'n Out clients do better on parole if they remain in the program for 9 to 12 months rather than terminating earlier (or later). Furthermore, while there is generally a positive relationship between time in Stay'n Out treatment and positive parole discharge (which tapers off after 12 months), time in the comparison modalities does not produce a positive effect. This pattern (as depicted in the figures) was found to be consistent for the other outcome variables as well, leading to the conclusion that Stay'n Out is more effective than no treatment and alternative treatments, provided clients remain in treatment for an optimal period, which appears to be 9 to 12 months. Although it is conceivable that clients who remain in treatment longer are more motivated than those who drop out, and that therefore the time-in-program effect might be related more to self-selection than to treatment effectiveness, one must keep in mind that motivation is a dynamic aspect of treatment. Indeed, the therapeutic process--with all its ups and downs--is intended to motivate

clients to change, while enabling clients who are not adequately motivated to drop out. To assume that motivation to change is sufficient to bring about behavioral change would mean that anyone who wanted to improve could do so on his or her own. Motivation is necessary but not sufficient for most offenders, and change requires participation in a therapeutic process.

Insofar as testing the hypothesis that treatment outcomes improve as time in the program increases, several statistical analyses were performed on subgroups of TC clients who spent varying amounts of time in treatment. For example, when clients who completed the program in 9 to 12 months were compared with clients who left within 3 months, differences between the percentages of those positively discharged from parole for the two treatment periods were significant. Among the males who terminated in less than 3 months, the percentage of those positively discharged was only 49.2 percent, whereas the rate positively discharged for the males who stayed in the program for the longer period was 77.3 percent. Similar findings were obtained for the females, although the percentages positively discharged from parole were higher than for their male counterparts (79 percent for females in treatment less than 3 months, 92 percent for the 9-to 12-month group).

For those who recidivated (i.e., those rearrested or reincarcerated), more time in TC treatment was related to positive treatment outcomes. When the mean time until arrest was compared for the two termination periods, it was found that clients who received less treatment were arrested much sooner than those who stayed in the program for 9 to 12 months. Furthermore, the percentage of Stay'n Out male clients who were not reincarcerated after 9 to 12 months of treatment was considerably higher (72 percent within three years after release from prison) than for males who resigned or were dismissed earlier (60 percent within three years). Indeed, a logistic regression analysis showed that the odds of not being reincarcerated were nearly three times greater for clients who remained in treatment for 9 to 12 months than for clients who spent less than 9 months in treatment.

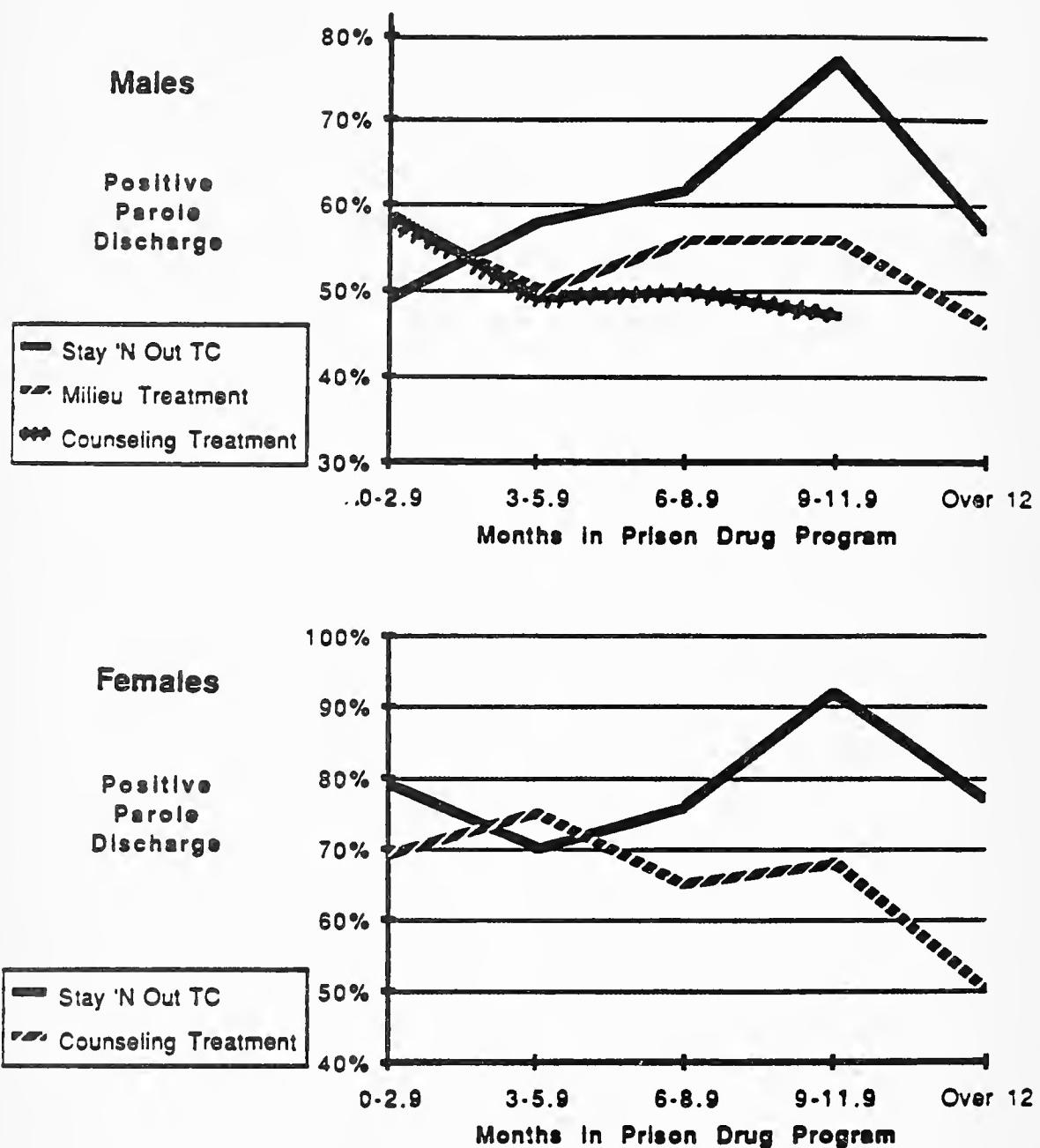


FIGURE 1: Positive parole discharge by time in program: (a) males and (b) females.

In addition to comparing the two subgroups, statistical analyses evaluated the functional relationship between time in the program and treatment outcomes. Perhaps the most important finding in this regard was that, as time in treatment increased, there was a (linear) improvement in treatment outcomes that tapered off after one year. One of several statistical analyses compared parole discharges among subjects who spent less than one year in treatment. Male clients who were positively discharged from parole spent more time in treatment (5.5 months on average) than males who were not positively discharged (they spent an average of only 4.5 months in treatment).

A related analysis compared clients who completed the program favorably (53 percent) with those who resigned and were dismissed (32 percent). (Neutral terminations, such as transfers for institutional reasons, or death, accounted for 15 percent of the terminations.) A significantly higher percentage of clients who completed the program favorably were not reincarcerated (72 percent within three years) as compared with clients who terminated negatively (61 percent within three years). The positive influence of time in the program on outcomes was independent of the effects of background variables. Regression analyses showed that time in the program was positively related to time until arrest and reincarceration when other significant background variables (age and criminal history) were held constant. Furthermore, time spent in the Stay'n Out TC reduced reincarceration, whereas time spent in the comparison modalities did not. Clients who received 9 to 12 months of treatment were not only less likely to recidivate than clients who spent less time in treatment, but they also did better than clients who remained in treatment more than one year. This finding was consistent for most of the outcome measures tested (time until arrest, positive parole discharge, reincarceration). Indeed, a multiple regression analysis confirmed a statistically significant decline in time until arrest for clients who remained in treatment for more

than 12 months. It should be noted, however, that the clients in this group are still significantly less likely to recidivate than those who terminate from the treatment in less than 9 months. Thus, the central conclusions of the research are that hard-core drug abusers who remain in the prison-based therapeutic community longer are more likely to succeed than those who leave earlier and that 9 to 12 months appears to be the optimal duration for the treatment.

Although differences among the groups were not statistically significant for all outcome measures (as shown in Table 1), the results indicate that the prison-based TC was generally more effective than the no-treatment group and the comparison treatment modalities. Among the most important findings were that the percentage of TC males arrested (27 percent) was significantly lower than the percentage arrested from the control (41 percent) and comparison treatment groups (35 percent for the milieu group, 40 percent for the counseling group). Similarly, the percentage of TC females arrested (18 percent) was significantly lower than the percentage arrested from the no-treatment control group (24 percent) and the counseling group (30 percent). The mean number of months until arrest was significantly greater for the male TC group (13 months) than for the alternative treatment groups (about 12 months) but not for the no-treatment control group (15 months). In contrast, the mean number of months until arrest for the female group (12 months) was considerably higher than for the control group (9 months) but not the counseling group (15 months). These differences, however, were not statistically significant.

The percentage of females positively discharged from parole (77 percent) was significantly greater for the TC group than for the control (53 percent) and counseling groups (68 percent). Although the differences in the parole discharge variable were not significantly different among the male groups, the percentage of TC males positively discharged (58 percent) was slightly higher than that for the

**TABLE 1 Recidivism Outcomes in the Stay'n Out Program**

Comparison Groups	Number	Arrested		Mean Months Until Arrested <sup>a</sup>	Positive Parole Discharge <sup>b</sup>	
		N	%		N	%
<b>Male Groups</b>						
TC treatment	435	117	26.9	13.1	157	58.1
Milieu	576	198	34.6	11.4	164	52.6
Counseling	261	104	39.8	12.0	69	52.7
No treatment	159	65	40.9	15.0	66	60.6
Statistic			Chi Sq=17.2	F=2.32		Chi Sq=3.40
Significance			p<.001	p=.07		n.s.
<b>Female Groups</b>						
TC treatment	247	44	17.8	12.4	98	77.2
Counseling	113	33	29.2	14.6	58	68.2
No treatment	38	9	23.7	8.6	95	52.9
Statistic			Chi Sq=5.37	F=1.03		Chi Sq=5.35
Significance			p=.07	n.s.		p=.07

<sup>a</sup>Represents time until arrest for prisoners who were arrested after their release from prison.

<sup>b</sup>For parole discharge data, 401 cases are missing for males and 169 cases are missing for females because the subjects had not been discharged by the time the data set was prepared for analysis.

SOURCE: Wexler et al. (1988b:107). (15 months); these differences, however, were not statistically significant.

two alternative treatment groups (53 percent). The percentage of males not reincarcerated was about the same for the TC group (56 percent) as for the comparison treatment groups (55 percent for the milieu group, 59 percent for the counseling group). Despite the mixed results, however, the clearly lower recidivism rates (in terms of the percentage of the TC groups arrested) and the differences in several of the comparisons of the number of months until arrest and the percentage

positively discharged from parole support the hypothesis that TC treatment reduces recidivism in comparison to no treatment and the alternative modalities.

Assessment of the possible influence of several psychological traits of clients did not produce significant or systematic associations between measures of psychological traits (e.g., depression, anxiety, and schizophrenia) and treatment

outcomes. Furthermore, the research design (utilization of treatment and no-treatment comparison groups) adequately controlled for the subtle effects of motivation, deterrence, and treatment. Thus, the Stay'n Out positive outcome results appear quite robust and replicate earlier findings in community-based TCs (De Leon, 1984).

The study of the Stay'n Out program is the first large-scale evaluation to provide fairly convincing evidence that prison-based therapeutic community treatment can produce significant reductions in recidivism rates. Indeed, dissemination of preliminary results has already had an important impact on the field and has generated interest as well as funding to support effective treatment for substance abusers while in prison (see the later discussion of Project REFORM).

#### Cornerstone:

The Cornerstone program is a highly respected prerelease treatment program for alcohol- and drug-dependent offenders (see Field, 1984, for a detailed description). The program began in 1976 and is situated on the grounds of the Oregon State Hospital in Salem. It consists of a 32-bed residential unit and a 6-month aftercare program. Cornerstone is jointly administrated by the Oregon Divisions of Mental Health and Corrections.

Inmates are referred to the program by prison counselors. Admission criteria require that candidates have a history of substance abuse but no history of psychosis or sex offenses, are at least 6 months but not more than 12 months from parole, qualify for minimum security, and plan to remain in the state after release. In 1984 Cornerstone clients had an average of about seven felony convictions and had served more than 7 years in prison. The mean age of first substance use was 12 years of age. Ninety-five percent of the clients had histories of polydrug abuse.

Like Stay'n Out, Cornerstone is modeled on the therapeutic community concept. Inmates participate in the operation of the program and in

a self-help recovery process. The program has a clearly articulated set of rules and consequences. The violation of cardinal rules (such as using drugs or violence) are grounds for dismissal. Consequences for infractions of other rules generally require clients to practice appropriate behaviors rather than submit to punishment. On the other hand, inmates earn privileges (in the form of increased freedom) for good behavior while in the program.

Clients are responsible for developing treatment plans at various stages of the recovery process. In addition to family meetings, encounter groups, and classes, they receive guidance and feedback from counselors. Family counseling is available for clients with spouses, and all members attend Alcoholics or Narcotics Anonymous groups in the community. Classes are given to help residents develop basic skills such as money management and work skills. After completing the residential treatment phase of the program, the clients enter a six-month aftercare phase in which they live and work in the community. During this phase, they maintain contact with Cornerstone staff, their parole officers, and, if their treatment requires, outpatient drug treatment programs.

Two evaluation studies of the Cornerstone program assessed several treatment outcomes, including recidivism (Field, 1984, 1989). We summarize the findings of both studies because they demonstrate the effectiveness of the program over time. The 1984 study evaluated all clients who graduated between 1976 and 1979 against three comparison groups: (1) clients who dropped out in less than one month during the same time frame, (2) all Oregon parolees (from 1974 to 1977) who had a history of substance abuse, and (3) a sample of Michigan parolees. There were no statistical differences between the demographic characteristics of the program graduates ( $N = 144$ ) and the dropouts ( $N = 27$ ). The group of Oregon parolees ( $N = 179$ ) had significantly less severe histories of substance abuse and crime than the program graduates. The sample of Michigan offenders ( $N = 217$ ) was based on a population similar in background to the Cornerstone groups.

A three-year follow-up study compared the groups according to two outcome measures: the percentage not returned to prison and the percentage not convicted of any crime. Program graduates had a significantly higher success rate for both outcome measures than each of the other groups. Seventy-one percent of program graduates were not reincarcerated three years after release; only 26 percent of the dropouts avoided reincarceration. Similarly, although slightly more than half the program graduates were not convicted of any crimes (including minor offenses), less than 15 percent of the dropouts were not convicted of any crimes. As Field points out, the factors that cause residents to drop out may also influence recidivism; however, the favorable comparison with the other two groups supports the hypothesis that treatment in the Cornerstone program is associated with reduced recidivism. Indeed, chi-square tests of both outcome measures showed that program graduates had significantly better outcomes ( $p < .01$ ) than the Oregon parole sample (63 percent of the parolees were not reincarcerated and only 36 percent were not convicted of any crimes). These univariate statistical differences, however, tend to underestimate the effect of the treatment because program graduates had significantly more severe criminal histories and substance abuse problems than the parole group.

Field's 1989 study produced similar results, using a different research design. A group of program graduates ( $N = 43$ ) with an average stay of 11 months in treatment was compared with three groups of clients who did not graduate: (1) clients who spent more than 6 months in the program ( $N = 43$ ), (2) clients who spent from 2 to 6 months in treatment ( $N = 58$ ), and (3) clients who were in treatment for less than 2 months ( $N = 65$ ). Three measures of recidivism were assessed in a three-year follow-up: the percentage of each group without a record of (1) arrest, (2) conviction, and (3) reincarceration (which included jail terms greater than 6 months as well as prison sentences).

The results for program graduates in this sample were quite similar to the findings in the earlier evaluation. Slightly more than half the graduates

were not convicted, and about three-quarters were not reincarcerated; in addition, 37 percent were not arrested. These results compared quite favorably to the three groups that did not graduate. For example, 21 percent of the nongraduates who were in treatment for more than 6 months were not arrested, 28 percent of them were not convicted, and 37 percent were not reincarcerated. The findings for the other dropouts are even more startling. Indeed, only 8 percent of the clients who dropped out in less than 2 months were not arrested during the three-year follow-up, only 11 percent were not convicted, and only 15 percent were not reincarcerated. These findings are consistent with the findings on the Stay'n Out program, which showed that increased time in the program was associated with more positive treatment outcomes.

In addition to comparing the percentage in each group that did not recidivate, Field assessed the effect of treatment on rates of recidivism, that is, the average number of times clients in each group were arrested, convicted, and incarcerated. (These measures imply an expected probability of the number of times offenders will recidivate, depending on the amount of time they spend in treatment.) The three-year posttreatment period was compared with two different three-year intervals prior to prison term that involved treatment in the Cornerstone program. These intervals were the 36 months "at risk" prior to Cornerstone incarceration and the prior 37 to 73 months "at risk." (The "at-risk" intervals represent time in the community; they exclude time spent incarcerated.) Because some subjects were too young to be "at risk" for six years before the Cornerstone incarceration, only about 75 percent of the subjects in each sample were included in this analysis.

The results of the analysis across the three recidivism rate variables were consistent and support the findings on the variables that measured outcomes in terms of the percentage of each group that did not recidivate. The arrest, conviction, and incarceration rates for the group of program graduates were lower than those rates for each of

the comparison groups. Furthermore, as the length of time in treatment increased, recidivism rates declined. Perhaps the most interesting findings pertain to the comparisons between pretreatment and posttreatment intervals. Whereas the recidivism rates during both pretreatment intervals were about the same for each of the groups, recidivism rates during the posttreatment period were considerably lower among program graduates. In addition, the decline in recidivism rates between the pretreatment and posttreatment periods was greatest for program graduates.

#### The Simon Fraser University Program:

This program provides treatment to prisoners in Vancouver, Canada (see Chaiken, 1989). The Department of Continuing Education administers the Prison Education Program under a contract with the government. The program is housed in trailers and bungalows (with classrooms, offices, a library, and a study area) on the grounds of four institutions. Although funding for the program was initially intended to reduce illiteracy, the goal of the program has broadened to include enhancing the moral development of offenders through a humanistic approach to education.

Simon Fraser faculty conduct a variety of classes in the liberal arts for student-prisoners who have histories of serious drug abuse and criminal activity. Students are expected to attend lectures and seminars, conduct library research, write papers, and participate in informal discussions of literature, current events, family practices, and publications. Two hundred students attend all-day sessions; they are given time for meals and appointments with medical, psychological, and social service staff. Seven full-time faculty members develop the curriculum and, with the assistance of adjunct faculty, teach courses. The faculty also oversees extracurricular activities and advises the students. There are no security guards assigned to the program, and substance use is not monitored. The program has an open admissions policy, but it requires participation for a minimum of one semester. There is no limit to the time students can stay in the program, and after they

are released from prison, they can finish their degrees as regular university students at the Burnaby campus.

In 1980 an evaluation of the program compared a group of 65 former student-inmates with a group of 65 inmates who did not attend the program but were released during the same time frame (Duguid, 1987). Although the mean age of the two groups was the same, the student-inmates had both a significantly higher percentage of individuals convicted of drug offenses and addicted to opiates (56 percent of the students were previously addicts, whereas only 21 percent of the nonstudents were addicts). The nonstudents were more likely to have been convicted of burglary than the students. Although 65 percent of the students had not completed high school, their average level of education (10.3 years) was higher than that of the nonstudents (8.5 years). A 3-year follow-up study found that half the nonstudents were returned to prison, whereas only 16 percent of the students were reincarcerated.

#### The Wharton Tract Narcotics Treatment Program:

This program, which opened in New Jersey in 1970 (and is described in Platt et al., 1980), housed 45 youthful offenders (over 19 years of age) in a former state forestry camp situated in Wharton State Forest. The program was a satellite unit of the Youth Reception and Correction Center in Yardville. Youthful offenders were admitted to the program if they met the following criteria: an 8- to 12-month period of incarceration remaining, more than 6 months but less than 5 years of dependency on heroin, no extreme psychopathology, no recent escape, and no serious offense pending.

The program was based on the therapeutic community model and included guided group interaction (GGI) in the therapeutic process. (The essence of GGI is that the development of a group enhances the recovery of its members through a process of interaction.) In addition, the program included interpersonal problem-solving group therapy as a technique. Problem-solving skills (e.g., identification of a problem and the feelings

associated with it, acquiring information, searching for possible solutions, and assessing consequences) were developed through a series of group exercises. The program also offered couples therapy, family counseling, individual counseling, and recreational activities. Residents completed the program in three phases: a 30-day evaluation period, intensive therapy (lasting at least 60 days), and a transition phase to ease residents back into the community.

An evaluation of the Wharton Tract program compared a group of graduates ( $N = 160$ ) with a control group ( $N = 148$ ) that met all the criteria for admission but did not enter treatment (Platt et al., 1980). There were no significant differences between the background characteristics of the two groups. Based on a two-year follow-up of parole outcomes, the research found that the addict control group had a significantly higher ( $p < .05$ ) recommitment rate (30 percent) than the program graduate group (18 percent). Furthermore, the percentage of individuals who remained arrest free was significantly higher among program graduates (51 percent) than in the control group (34 percent).

#### **The Terminal Island Drug Treatment Program:**

The Terminal Island program was established under Title II of the Narcotic Addiction Rehabilitation Act (NARA), which authorized federal judges to commit convicted felons to prison drug treatment programs after an examination had determined that they were addicts who could be rehabilitated. In 1968 a drug treatment program was established at the federal correctional facilities on Terminal Island and at two other institutions. The program consisted of several components: a therapeutic community, psychotherapy and counseling, biofeedback training, a transactional analysis group, and educational, vocational, and social activities. An aftercare component ensured that a plan would be developed for parole supervision (including continued therapy, job or educational placement, assignment to a halfway house, and urinalysis).

Although legislative authority for the NARA program was repealed during the mid-1980s,

evaluation studies garnered support for the program while it was in operation. Compared with the general federal prison population, inmates in the program were younger (25 years old on average), less educated (10 years), less employable (90 percent were unskilled), more heavily involved in drugs (heroin use averaging five years), and more likely to be recidivists (20 percent had previously violated parole) (Chaiken, 1989). Although the design of the evaluation research did not compare the treatment group with a control group, there is evidence to support the contention that the treatment reduced recidivism. The reincarceration rate for the Terminal Island group was only 31 percent after three years. More than half the NARA inmates in another institution were reincarcerated during the same time frame, and studies of recidivism rates among federal parolees (not in treatment) have been found to be even higher (Glaser, 1965).

The efficacy of the therapeutic community as a modality suitable for the treatment of inmates is further substantiated by a study conducted by Nash (1975). In this evaluation, changes in arrest rates for a total of 173 inmates who attended seven prison-based drug programs were assessed. Four of these programs were TCs based on the original Synanon model, two were counseling programs, and one was a drug-free residential program. The original study by Nash did not find significant differences in arrest rates between any of the programs and a comparison group; however, a more extensive analysis of the data by Des Jarlais and Wexler (1979) found that two of the four TCs did significantly better than the comparison groups.

#### **Community-Based Drug Treatment**

A review of community-based drug treatment programs gives insight into the types of interventions that are likely to be effective for prisoners and parolees. A major national study that supported the efficacy of residential drug treatment was the Drug Abuse Reporting Program (DARP). This research study collected data on a sample of approximately 44,000 drug abusers

admitted to 52 drug treatment programs between 1969 and 1973 (Simpson, 1984; Simpson and Sells, 1982). Outcome studies of two cohorts (subsamples interviewed at 6 and 12 year follow-up intervals) were conducted (Simpson and Friend, 1988).

The major findings relevant to the issue of prison-based drug treatment are as follows. Favorable outcomes (i.e., reductions in drug use and criminality) were associated with therapeutic communities, methadone maintenance, and drug-free outpatient treatment. About 28 percent of the TC group showed highly favorable outcomes, that is, no illicit drug use (except less than daily marijuana use) and no arrests or incarcerations. About 40 percent of the TC group had moderately favorable outcomes (no daily use of illicit drugs, not more than 30 days in jail, and no arrests for crimes of violence or property crimes). The outcomes for the TC group were not significantly different from those of the methadone maintenance or drug-free outpatient treatments, but they were significantly more favorable than detoxification.

Follow-up studies have also been conducted in the Treatment Outcome Prospective Study (TOPS), which is based on a sample of 11,750 clients admitted to treatment between 1979 and 1981 (Hubbard et al., 1984, 1988). TOPS also evaluated the outcomes of each of the drug modalities discussed above. According to Hubbard and colleagues, "[t]he largest changes in predatory illegal activity occurred for residential clients. Where 60 percent reported at least one act in the year before TOPS treatment, only about one third reported activity in the year after treatment" (Hubbard et al., 1984:60).

Although a small percentage of long-term methadone clients and outpatient drug-free clients reported illegal activities in the year after treatment (about 20 percent each), the decline in the percentage of clients engaging in illegal activities was greatest after treatment in residential programs. Criminal justice system referrals stayed in treatment longer than clients with no legal

involvement, and clients who stayed in residential programs longer than six months had significantly lower recidivism rates than clients who dropped out of treatment earlier.

TCs such as Phoenix House have been effective in curbing drug use and crime among clients with extensive histories of antisocial behavior. Phoenix House is one of the oldest and largest concept-based TCs. The pioneering research efforts at Phoenix House under the leadership of George De Leon have set a model for the field and produced a prolific body of work that has been influential in gaining recognition of TC effectiveness (De Leon, 1984; De Leon et al., 1972; De Leon et al., 1979). The program has recognized the dual importance of maintaining ex-addict leadership and opening the process to meaningful research that would enhance the program without compromising its treatment efforts. The Phoenix House research is of particular importance because the Stay'n Out prison TC program (described previously) was founded by a Phoenix graduate and is a modification of the Phoenix approach.

The major Phoenix outcome research study included two cohorts ( $N = 731$ ) which were samples of the 1970-1971 and 1974-1975 residential populations (De Leon, 1984). The use of two samples adds power to the findings because the results are replicated across groups. The findings for both groups were quite similar; therefore, our summary is limited to the more recent cohort (1974-1975). This cohort included graduates and dropouts who were followed up to two years after treatment.

Comparisons were made between the year prior to treatment and the second year of the follow-up period. Drug use showed dramatic declines: among graduates, opiate use decreased to zero from 66 percent prior to treatment, and dropouts also showed a decrease from 67 to 18 percent. Moreover, there was a significant decline in criminality: the percentage of graduates reporting arrests decreased from 55 percent pretreatment to 3 percent during the second year posttreatment,

and dropouts decreased from 37 to 18 percent. Furthermore, the research found improvements in employment and posttreatment measures of psychological adjustment that were correlated with positive behavior changes. The positive changes in posttreatment behavior were generally correlated with time spent in treatment.

### **WHAT WORKS AND WHAT DOES NOT WORK IN PRISON-BASED TREATMENT**

Based on evaluation studies of effective treatment programs and observation of clinical practices, it is possible to identify several elements of treatment programs that tend to work well and others that have been found not to work. This section describes the forces that impede success and the factors conducive to it. As new programs are implemented, further research should be conducted to determine whether the current state of knowledge stands up to more rigorous scientific scrutiny. Based on the factors related to success, we set forth several guidelines we believe should be followed in establishing treatment programs for prisoners and parolees. Finally, we briefly describe a national program (sponsored by the Bureau of Justice Assistance) that has adopted these guidelines to foster the development of drug treatment in corrections.

#### **Impediments to Prison-Based Drug Treatment**

Broadly defined, there are two sets of forces that impede successful treatment outcomes (i.e., reduction of recidivism). The origin of one set is external to the program and may best be characterized as institutional resistance; the other emanates from within the program and is primarily related to intervention techniques.

The institutional environment plays a large role in shaping the quality of treatment. A lack of support from correctional administrators and officers can easily hamper a program. Many programs are met with hostility on the part of correctional authorities during their early stages.

Indeed, program residents and staff often complain about the tactics used by correctional staff to sabotage their program (e.g., requiring a count of inmates in the middle of a group therapy session). In addition, inmates are often skeptical about rehabilitation programs. Perhaps more important is the pervasive, insidious, antisocial inmate code, which is antithetical to treatment and which, will, if not effectively dealt with, inevitably undermine even the most promising of therapeutic approaches. The easiest and least costly method for dealing with the inmate subculture is to establish separate treatment units that isolate clients from the general prison population. Usually the first task treatment staff must undertake is to break down the attitude of machismo and confront the disruptive behavior of inmates when they enter treatment.

Perhaps more significant is that certain structural characteristics of treatment interventions are prone to failure. These factors are related primarily to the theoretical basis of the treatment and its attitude toward offenders. Evaluation studies have found several rehabilitation approaches to be unsuccessful (for a detailed review, see Gendreau and Ross, 1983-1984, 1987). Interventions based on deterrence models (such as "Scared Straight" programs, which attempt to instill fear) have shown very limited effects, and some have been associated with increased offending. On the other hand, counseling programs based on a model of trust (e.g., counselors who treat clients as "friends" or permit inmates to run therapy groups) are also counterproductive. Finally, there is no evidence to support the contention that programs based on a disease model work. Following a review of several studies, Gendreau and Ross concluded, "[w]hether the disease is some form of psychopathology or biological deficit (e.g., extra chromosomes), we have not found one well controlled positive report . . ." (1983-1984:34).

The lack of success of these treatment models stems from the failure of the programs to strike a balance between recognizing the antisocial behaviors of clients and emphasizing the development of prosocial conduct. Behavioral

programs that are imposed without involving inmates in their development do not work as well as those that do involve inmates. Such programs are often targeted at antisocial rather than prosocial behaviors, which gives undue attention and reinforcement to negative behavior.

Programs that either fail to neutralize the inmate code (e.g., by recruiting inmate leaders into treatment or housing the program in a unit separated from the general prison population) or to utilize inmate peer pressure in a positive way (e.g., through encounter groups that encourage confrontation) tend to be unsuccessful. Other factors that tend to inhibit success are a lack of well-trained, dedicated staff, insufficient resources, and a lack of aftercare services. Indeed, recidivism rates are higher when there is no continuity of care, that is, when the treatment begun in prison is not sustained after inmates return to the community. In conclusion, drug treatment programs that do not overcome resistance from external forces and do not tailor treatment to the characteristics peculiar to prison inmates tend to be unsuccessful.

### **Elements of Effective Correctional Treatment Programs**

Although the number of studies of effective treatment programs is limited, there is enough evidence to suggest that certain approaches are conducive to success. In general, the main factors related to success are as follows: (1) treatment is based on a social learning theory of behavior, (2) programs offer an array of treatment options appropriate to the needs of offenders, (3) relationships are built to engender respect for the program, and (4) the integrity and authority of treatment staff are emphasized. Each of these factors is discussed briefly in the following paragraphs; a set of guidelines for implementing treatment in corrections is suggested in the next section (for a detailed discussion, see Lipton, 1989, 1990; Wexler et al., 1988a).

In contrast to the treatment models that have not been found effective, the majority of successful

community-based and prison-based programs are founded on a social learning theory of criminal behavior (see Bandura, 1979; Nietzel, 1979). This theory suggests that criminal behavior is learned through a process of social interaction; treatment, therefore, develops prosocial behaviors by improving interpersonal relations. Effective interventions include self-help approaches (such as therapeutic communities), family therapy, contingency contracting, role playing and modeling, vocational and social skills training, interpersonal cognitive problem-solving skills training, and peer-oriented behavioral programs (Gendreau and Ross, 1983-1984, 1987). An important point is that none of these techniques have been found to be superior; rather, most successful programs combine several approaches. Common to them all is that antisocial attitudes and behaviors are altered by reinforcing prosocial behaviors. A final note is that some evidence exists that techniques based on the theories of relapse prevention and self-efficacy enhance success (Annis and Davis, 1987; Bandura, 1977; Brownwell et al., 1986). These theories are especially relevant to prison-based treatment in that they focus the intervention on the reasons why inmates relapse and instill confidence that inmates can cope with problems after release--they also justify the need for continuity of care.

Although some approaches such as drug education or occasional counseling may be adequate for certain inmates (i.e., those with little prior involvement with drugs), offenders who exhibit serious lifestyle problems (in particular, chronic polydrug abuse and extensive involvement in crime) require comprehensive and intensive treatment. Programs that have been successful in treating serious offenders include a variety of components, such as encounter groups, individual counseling, drug education, and specialty groups (which focus on specific topics such as anger management, the problems of adult children of alcoholics, and stress reduction techniques). These programs tend to emphasize the development of problem-solving capabilities. They are generally quite intensive; that is, inmates live together and their shared experiences become the subject of

discussion at regularly scheduled group therapy sessions. Program residents have access to staff when needed, and the programs are designed to keep inmates in treatment for an adequate duration (usually more than six months).

A critical factor influencing the success of programs is the nature of the relationships built by staff with prison authorities, nonprogram inmates, and program residents. Success in this area requires good public relations and diplomacy. Care must be taken to demonstrate the integrity of the program to prison officials and general population inmates. Respect and trust are developed by finding a balance between a treatment attitude (which requires empathy and caring) and a corrections ethos (which emphasizes institutional authority). The support of correctional authorities depends very much on their belief that the program maintains security. When programs create a safe environment for their residents (including psychological as well as physical safety), they can focus their attention on treatment, and the number of inmates requesting admission tends to increase.

The success of treatment programs in correctional settings also depends on the degree of integrity and authority they exhibit. Program integrity requires a commitment to the goals of the program, effective leadership, and competent staff (Quay, 1977; Sechrest et al., 1979). Successful programs have capable directors who provide adequate supervision to well-trained staff. They are able to establish credible authority by clearly setting forth the rules of the program and treating violations with appropriate consequences.

### **Guidelines for Effective Treatment**

Based on the evaluation research and our observation of clinical practices, we have elsewhere suggested a strategy for treating substance-abusing offenders (Wexler et al., 1988a). The following are several guidelines for implementing drug treatment programs for prisoners and parolees.

1. Programs should emphasize a self-help approach. Therapeutic communities such as Stay'n Out are based on this philosophy. Although compulsory participation may be required for some offenders (and evaluations of community-based programs have found that legal pressure increases client retention), we believe that persuasion is a better strategy. Offering incentives to join (e.g., early release for successful program completion, better living conditions, a safer environment) and allowing inmates to participate in the operation of the program foster the self-help process. Successful programs include inmates in program development and involve them in virtually all aspects of the recovery process.
2. Corrections should establish a variety of treatment options appropriate to the needs of offenders. A sequence of interventions should be planned. These include diagnostic tests as part of intake procedures, assignment to programs based on level of need (e.g., drug education, counseling, intensive treatment, aftercare), and case reviews and reassignment based on client progress. Treatment plans developed through consultation between clients and their counselors clarify goals and expectations and structure the recovery process.
3. Although the vast majority of inmates are in need of some form of treatment, resources should be directed first toward the minority that are chronic polydrug abusers. These offenders account for a disproportionate amount of crime; they commit hundreds of serious crimes each year. As discussed earlier, intensive prison-based treatment programs (such as Stay'n Out and Cornerstone) have been able to prolong the time that parolees remain crime free as well as reduce the likelihood that they recidivate. Thus, a cost-effective strategy would involve high-rate offenders in intensive treatment programs while engaging prisoners with less severe drug problems in less costly interventions. It is essential, however, that

- these programs address the overall lifestyle problems of their clients and not merely their substance abuse.
4. Residential prison-based treatment programs should be allocated a separate unit to minimize the harmful effects of the inmate subculture and code.
  5. Programs should establish and enforce a clearly articulated set of rules and rewards. Successful programs respond to the violation of cardinal rules (e.g., violence, sexual activity) with immediate dismissal. Developing a hierarchy of rules (e.g., some dealing with actions that affect security, others dealing with conduct during therapy groups) allows correctional officials to decide on sanctions for infractions that relate to security while permitting program residents to be responsible for conduct within the group. Progress in treatment and good conduct in the program should be rewarded with increased privileges while in the institution.
  6. Program staff should include ex-offender/ex-addicts. Graduates of treatment programs who are able to remain drug free and to abstain from crime while in the community serve as excellent role models. After adequate training, they should be offered opportunities for employment in community- and prison-based treatment programs.
  7. For many offenders, prison-based treatment should be followed by treatment in the community. This can be in the form of intensive supervision, prerelease to a halfway house that offers drug counseling, or residence in a therapeutic community program. The possible use of drugs should be monitored by regular urinalysis. Incentives in the form of increased liberty can be given to parolees who do not violate the conditions of their parole.
  8. Coordination between prison authorities and aftercare providers is essential. Continuity of care should be built into the design of prison-

based programs. The concept of "aftercare" has fostered the belief that prison-based treatment and community-based treatment are separate functions. Although responsibility for prisoners and parolees may reside with different correctional authorities, effective treatment for offenders requires that they operate in tandem. Thus, prison treatment staff should develop reentry plans with parole officers a few months before release. Coordination with self-help groups (e.g., Alcoholics Anonymous, Narcotics Anonymous) is also necessary.

9. Evaluations of treatment programs should be integrated into the design of the programs. The evaluations should focus on implementation issues and the effects on outcome variables. There are models for conducting such evaluation research (see, for example, Wexler et al., 1988b).

#### **PROJECT REFORM: A NATIONAL PROJECT TO ESTABLISH DRUG TREATMENT PROGRAMS IN CORRECTIONS**

Project REFORM (Comprehensive State Department of Corrections Treatment Strategy for Drug Abuse) was funded by the Bureau of Justice Assistance in July 1987 and attempts to develop drug treatment programs in corrections settings based on the guidelines described in the previous section. As such, this project provides a rare opportunity to bridge the realms of abstract concepts and concrete reality. Narcotic and Drug Research, Inc., was asked to serve as the national coordinator for the REFORM technical assistance project, with the goal of assisting states to plan for and then implement or expand statewide drug treatment and rehabilitation strategies in state departments of corrections.

The project provides funding, guidance, technical assistance, training, and monitoring for two phases: (1) a planning phase (lasting 6 months to

a year) in which a comprehensive state plan for correctional substance abuse treatment is developed; and (2) an implementation phase (approximately 18 months) for states that successfully complete the planning phase. Currently, seven states (Alabama, Connecticut, Delaware, Florida, New Mexico, New York, and Oregon) have completed the planning phase and are engaged in implementation; California, Hawaii, New Jersey, and Washington are currently participating in the planning phase.

Overall, then, this program assists states in developing a comprehensive set of drug treatment programs through a statewide correctional strategy for dealing with drug offenders. The strategies are developed on the basis of research that has demonstrated effective models of drug treatment. A major goal of the project is to reduce recidivism; other goals relate broadly to improving drug treatment in corrections. A major target group of the project is inmates with chronic drug abuse problems.

### **CONCLUSION: THE FUTURE OF DRUG TREATMENT IN CORRECTIONS**

The trend in corrections during recent years has been for more prisoners to receive some form of drug treatment. Because policymakers and the public are concerned about drug abuse and crime, it is likely that this trend will continue. In this conclusion, we suggest a direction for the future that is likely to be a constructive, if only partial, solution to the crime problem.

The complexity of the problem and the limitations in both the current state of knowledge and practice suggest that a period of experimentation with treatment interventions is needed and that new techniques should be thoroughly evaluated. The guidelines presented earlier represent our best judgment as to what approaches offer promise for the future of correctional drug treatment. Our assessment of the situation, however, is constrained by the fact that the evidence of

effective interventions is limited, as is the current state of the art in correctional treatment. Accordingly, corrections should expand on what currently works, and it should attempt innovative approaches in the future. These interventions should be carefully evaluated so that drug treatment in correctional settings can be modified based on the best available scientific knowledge.

As our guidelines suggest, a logical starting point is to increase the number of chronic polydrug abusers in intensive prison-based treatment programs and enable them to continue their recovery in residential programs after they are released. Currently, corrections offers a variety of treatment options, such as Alcoholics Anonymous meetings, counseling, and drug education. We need to know much more about the effectiveness of these and other approaches. In particular, what kinds of treatment are appropriate for different types of offenders? Moreover, emphasis should be placed on developing cooperation between drug treatment providers and custodial staff. This effort can be assisted, for example, by cross-training treatment staff in security and correctional officers in treatment. Coordination between correctional treatment providers and other human services providers (educational, vocational, medical, social, and psychological) needs to be improved. Similarly, community resources need to be mobilized and integrated into an improved continuity of care system.

In addition to expanding on current practice, new program innovations should be attempted. For example, there is some evidence that shock incarceration is effective with youthful offenders (MacKenzie and Shaw, 1988); combining shock incarceration with an intensive drug treatment program for addicts might be a valuable approach. New techniques in intensive parole supervision can also be implemented. Developments in community-based drug treatment should be considered for their possible inclusion in correctional settings. Chemotherapy treatment is another possibility. For example, research currently under way at a methadone program in the jail on Rikers Island suggests that this might be

an effective intervention (Magura et al., 1989). Although there are no methadone maintenance programs in prisons at this time, an experiment to see if such a program could stabilize heroin addicts in prison so that they can continue treatment in community-based programs after release might be worth trying.

Regardless of the specific innovations that are attempted, they must all be properly tested. Evaluation research should search especially for cost-effective strategies for reducing recidivism (that is, strategies that do not negatively affect other policy goals such as maintaining security and controlling overcrowding). Our ability to reduce recidivism among drug users depends almost entirely on our ability to develop effective intervention techniques and our ability to reach agreement on which programs to fund.

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#### REFERENCES

Allison, M., and R.L. Hubbard (1985) Drug abuse treatment process: a review of literature. *International Journal of the Addictions* 20(9):1321-1345.

Anglin, M.D., and W.H. McGlothin (1984) Outcome of narcotic addict treatment in California. In F.M. Tims and J.P. Ludford, eds., *Drug Abuse Treatment Evaluation: Strategies, Progress and Prospects*. NIDA Research Monograph 51. Rockville, Md.: National Institute on Drug Abuse.

Anglin, M.D., M.L. Brecht, J.A. Woodward, and D.G. Conett (1986) An empirical study of maturing out: conditional factors. *International Journal of the Addictions* 21:233-246.

Annis, H., and C.S. Davis (1987) Self-efficacy and the treatment trial. In T.B. Baker and D. Cannon, eds., *Addictive Disorders: Psychological Research in Assessment and Treatment*. New York: Praeger.

Bailey, W.C. (1966) Correctional outcome: an evaluation of 100 reports. *Journal of Criminal Law, Criminology and Police Sciences* 57:153-160.

Bale, R.N. (1979) Outcome research in a therapeutic community for drug abusers: a critical review. *International Journal of the Addictions* 14(8):1053-1074.

Ball, J.C. (1986) The hyper-criminal opiate addict. Pp. 81-104 in B.D. Johnson and E. Wish, eds., *Crime Rates Among Drug Abusing Offenders: Final Report to the National Institute of Justice*. New York: Narcotic and Drug Research, Inc.

Ball, J.C., L. Rosen, S.A. Flueck, and D.N. Nurco (1981) The criminology of heroin addicts when addicted and when off opiates. Pp. 39-65 in J.A. Inciardi, ed., *The Drugs-Crime Connection*. Beverly Hills, Calif.: Sage Publication.

Ball, J.C., L. Rosen, S.A. Flueck, and D.N. Nurco (1982) Lifetime criminality of heroin addicts in the United States. *Journal of Drug Issues* 3:225-239.

- Ball, J.C., J.W. Shaffer, and D.N. Nurco (1983) Day to day criminality of heroin addicts in Baltimore--a study in the continuity of offense rates. *Drug and Alcohol Dependence* 12:119-142.
- Bandura, A. (1977) Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review* 94:191-215.
- Bandura, A. (1979) *Social Learning Theory*. Englewood Cliffs, N.J.: Prentice-Hall.
- Barton, W.I. (1974) Drug abuse histories and criminality survey of inmates of state correctional facilities. *International Journal of the Addictions* 15:233-258.
- Brewington, V., L. Arella, S. Deren, and J. Randell (1987) Obstacles to the utilization of vocational services: an analysis of the literature. *International Journal of the Addictions* 22(11):1091-1118.
- Brownwell, D.D., G.A. Marlatt, E. Lichtenstein, and G.T. Wilson (1986) Understanding and preventing relapse. *American Psychologist* 41:765-782.
- Bureau of Justice Statistics (1983) *Prisoners and Drugs*. Washington, D.C.: U.S. Department of Justice.
- Chaiken, M.R. (1986) Crime rates and substance abuse among types of offenders. In B.D. Johnson and E. Wish, eds., *Crime Rates Among Drug-Abusing Offenders: Final Report to the National Institute of Justice*. New York: Narcotic and Drug Research, Inc..
- Chaiken, M.R. (1989) *Prison Programs for Drug-Involved Offenders*. Washington, D.C.: National Institute of Justice.
- Chaiken, J.M., and M.R. Chaiken (1982) *Varieties of Criminal Behavior*. Santa Monica, Calif.: The Rand Corporation.
- Chaiken, J., and M. Chaiken (1983) Crime rates and the active offender. Pp. 11-29 in J.Q. Wilson, ed., *Crime and Public Policy*. New Brunswick, N.J.: Transaction Books.
- Chaiken, M.R., and B.D. Johnson (1988) *Characteristics of Different Types of Drug Involved Offenders*. Washington, D.C.: National Institute of Justice.
- Collins, J.J., R.L. Hubbard, and J.V. Rachal (1985) Expensive drug use in illegal income: a test of explanatory hypotheses. *Criminology* 23(4):743-764.
- Cullen, F., and P. Gendreau (1989) The effectiveness of correctional rehabilitation. In L. Goodstein and D.L. MacKenzie, eds., *The American Prison: Issues in Research Policy*. New York: Plenum.
- De Leon, G. (1979) The therapeutic community: study of effectiveness. Internal report submitted to the National Institute on Drug Abuse, Rockville, Md.
- De Leon, G. (1984) *The Therapeutic Community: Study of Effectiveness*. Treatment Research Monograph Series. Rockville, Md.: National Institute on Drug Abuse.
- De Leon, G. (1985) The therapeutic community: status and evolution. *International Journal of the Addictions* (20)6-7:823-844.
- De Leon, G., and J. Ziegenfuss, Jr. (1986) *Therapeutic Communities for Addictions*. Springfield, Ill.: Charles C Thomas.
- De Leon, G., S. Holland, and M.S. Rosenthal (1972) Phoenix House: criminal activity of drop-outs. *Journal of the American Medical Association* 226(6):686-689.
- De Leon, G., M. Andrews, H.K. Wexler, J. Jaffe, and M.S. Rosenthal (1979) Therapeutic community drop-outs: criminal behavior five years after treatment. *Drug and Alcohol Abuse* 6(3):253-271.
- Des Jarlais, D., and H.K. Wexler (1979) Internal Report for the New York State Division of Substance Abuse Services, Albany.

- Duguid, S. (1987) *University Prison Education in British Columbia*. Burnaby, B.C.: Simon Fraser University.
- Field, G. (1984) The cornerstone program: a client outcome study. *Federal Probation* 48:50-55.
- Field, G. (1989) A study of the effects of intensive treatment on reducing the criminal recidivism of addicted offenders. *Federal Probation* 53(10):51-56.
- Gandassy, R.P., J.R. William, J. Cohen, et al. (1980) *Drugs and Crime: A Survey and Analysis of the Literature*. National Institute of Justice Report. Washington, D.C.: U.S. Department of Justice.
- Gendreau, P. (1981) Treatment in corrections: Martinson was wrong. *Canadian Psychology* 22:332-338.
- Gendreau, P., and R.R. Ross (1979) Effective correctional treatment: bibliography for cynics. *Crime and Delinquency* 25(4):463-489.
- Gendreau, P., and R.R. Ross (1983-1984) Correctional treatment. Some recommendations for successful intervention. *Juvenile and Family Court Journal* 34:31-39.
- Gendreau, P., and R.R. Ross (1987) Revivification of rehabilitation: evidence from the 1980s. *Justice Quarterly* 4(3):349-407.
- Glaser, D. (1965) *The Effectiveness of a Prison and Parole System*. Indianapolis, Ind.: Bobbs-Merrill.
- Goldstein, P.J. (1981) Getting over: economic alternatives to predatory crime among street drug users. Pp. 67-84 in J.A. Inciardi, ed., *The Drugs/Crime Connection*. Beverly Hills, Calif.: Sage Publications.
- Goldstein, P.J. (1985) The drugs/violence nexus: a tripartite conceptual framework. *Journal of Drug Issues* Fall:493-506.
- Goldstein, P.J. (1985) Drugs and violent crime. Pp. 16-48 in N.A. Weiner and M.E. Wolfgang, eds., *Pathways to Criminal Violence*. Beverly Hills, Calif.: Sage Publications.
- Goldstein, P.J., H.H. Brownstein, P.J. Ryan, and P.A. Bellucci (1989) *Crack and Homicide in New York City, 1988: A Conceptually-Based Event Analysis*. New York: Narcotic and Drug Research, Inc.
- Goldstein, P.J., P.A. Bellucci, B. Spunt, and T. Miller (1990) *Frequency of Cocaine Use and Violence: A Comparison Between Men and Women*. New York: Narcotic and Drug Research, Inc.
- Greenwood, P.W., and F.E. Zimring (1985) *One More Chance: The Pursuit of Promising Intervention Strategies for Chronic Juvenile Offenders*. Santa Monica, Calif.: The Rand Corporation.
- Gropper, B.A. (1985) *Probing the Links Between Drugs and Crime*. Washington, D.C.: U.S. Department of Justice.
- Hubbard, R.L., J.V. Rachel, S.G. Craddock, and E.R. Cavanaugh (1984) Treatment outcome prospective study (TOPS): client characteristics and behaviors before, during, and after treatment. Pp. 29-41 in F.M. Tims and J.P. Ludford, eds., *Drug Abuse Treatment Evaluation: Strategies, Progress and Prospects*. NIDA Research Monograph 51. DHHS Pub. No. (ADM) 84-1349. Rockville, Md.: National Institute on Drug Abuse.
- Hubbard, R.L., J.J. Collins, J.V. Rachel, and E.R. Cavanaugh (1988) The criminal justice client in drug abuse treatment. Pp. 57-80 in C.G. Leukefeld and F.M. Tims, eds., *Compulsory Treatment of Drug Abuse: Research and Clinical Practice*. NIDA Research Monograph 86. Rockville, Md.: National Institute on Drug Abuse.
- Hunt, D.E., D.S. Lipton, and B. Spunt (1984) Patterns of criminal activity among methadone clients and current narcotics users not in treatment. *Journal of Drug Issues* Fall:687-702.
- Hunt D.E., B.J. Spunt, D.S. Lipton, D.S. Goldsmith, and D.L. Strug (1986) The costly bonus: cocaine related crime among methadone treatment clients. *Advances in Alcohol and Substance Abuse* 6(2, Winter):107-122.

- Inciardi, J.A. (1979) Heroin use and street crime. *Crime and Delinquency* 25(3):335-346.
- Innes, C.A. (1988) *Profile of State Prison Inmates: 1986*. Bureau of Justice Statistics Special Report. Washington, D.C.: U.S. Department of Justice.
- Johnson, B.D., P. Goldstein, E. Preble, J. Schmeidler, D.S. Lipton, B. Spunt, and T. Miller (1985) *Taking Care of Business: The Economics of Crime By Heroin Abusers*. Lexington, Mass.: Lexington Books.
- Johnson, B.D., D.S. Lipton, and E.D. Wish (1986) *Facts About the Criminality of Heroin and Cocaine Abusers and Some New Alternatives to Incarceration*. New York: Narcotic and Drug Research, Inc.
- Johnson, B.D., T. Williams, K.A. Dei, and H. Sanabria (in press) Drug abuse in the inner city: impact on hard-drug users and the community. In J.Q. Wilson and M. Tonry, eds., *Drugs and Crime*. Crime and Justice Series, Vol. 13. Chicago: University of Chicago Press.
- Kalish, C.B., and W.T. Masumura (1983) *Prisoners and Drugs*. Bureau of Justice Statistics Bulletin. Washington, D.C.: U.S. Bureau of Justice.
- Kassebaum, G., D. Ward, and D. Wilner (1971) *Prison Treatment and Parole Survival: An Empirical Assessment*. New York: John Wiley & Sons, Inc.
- Leukefeld, C.G., and F.M. Tims (1988) *Compulsory Treatment of Drug Abuse: Research and Clinical Practice*. NIDA Research Monograph 86. Rockville, Md.: National Institute on Drug Abuse.
- Lipton, D. (1983) Important conditions for successful rehabilitation. Paper presented at the Bellevue Forensic Psychiatry Conference, New York City.
- Lipton, D.S. (1989) *The Prevention of Recidivism: A Manifesto Regarding the Role of Rehabilitation for Drug Abusing Offenders*. New York: Narcotic and Drug Research, Inc.
- Lipton, D.S. (1990) Principles of successful correctional intervention. Paper presented at the Bureau of Justice Statistics/State Justice Institute Regional Seminar: Drugs and the Judicial Response, Washington, D.C.
- Lipton, D.S., and H.K. Wexler (1988) Breaking the drug-crime connection--rehabilitation projects show promise. *Corrections Today* 50(5):144-147.
- Lipton, D., R. Martinson, and J. Wilks (1975) *The Effectiveness of Correctional Treatment*. New York: Praeger Publishers.
- Magura, S., H. Joseph, and A. Rosenblum (1989) *Methadone Maintenance in the New York City Jails*. New York: Narcotic and Drug Research, Inc.
- Macdonald, D.G., and K. Canestrini (1987) *Follow-up Study of a Sample of Participants in the Stay'n Out Drug Program*. Albany, N.Y.: New York State Department of Correctional Services.
- MacKenzie, D.L., and J.W. Shaw (1988) Inmate adjustment and change during shock incarceration. Paper presented at a meeting of the American Society of Criminology, Chicago.
- Maltz, M.D. (1984) *Recidivism*. Orlando, Fla.: Academic Press, Inc.
- Martinson, R. (1974) What works? Questions and answers about prison preform. *The Public Interest* 35:22-45.
- Martinson, R. (1979) New findings, new views: a note of caution regarding sentencing reform. *Hofstra Law Review* 7:243-258.
- McBride, D. (1981) Drugs and violence. In J.A. Inciardi, ed., *The Drugs/Crime Connection*. Beverly Hills, Calif.: Sage Publications.
- McGlothlin, W.C., D.M. Anglin, and B.D. Wilson (1977) *An Evaluation of the California Civil Addict Program*. Rockville, Md.: National Institute on Drug Abuse.
- McGlothlin, W.H., M.D. Anglin, and D.B. Wilson (1978) Narcotic addiction and crime. *Criminology* 16:293-315.

- Nash, G. (1973) *The Impact of Drug Abuse Treatment Upon Criminality: A Look at 19 Programs.* Upper Montclair, N.J.: Montclair State College.
- National Institute of Justice (1988) *Drug Use Forecasting (DUF): April Through June 1988 Data.* Washington, D.C.: U.S. Department of Justice.
- National Institute on Drug Abuse (1981) *Drug Abuse Treatment in Prisons.* Treatment Research Report Series. DHHS Pub. No. (ADM) 81-1149. Rockville, Md.: National Institute on Drug Abuse.
- New York City Police Department (1983) Homicide analysis: 1981. New York.
- New York State Division of Substance Abuse Services (1980) Prison drug program evaluation report. Albany, New York.
- Nietzel, M.T. (1979) *Crime and Its Modification: A Social Learning Perspective.* Elmsford, N.Y.: Pergamon Press.
- Palmer, T. (1975) Martinson revisited. *Journal of Research in Crime and Delinquency* 12:133-152.
- Platt, J., C. Labate, and R. Wicks (1977) *Evaluative Research in Correctional Drug Treatment.* Lexington, Mass.: Lexington Books.
- Platt, J.J., G.M. Perry, and D.S. Metzger (1980) The evolution of a heroin addiction treatment program within a correctional environment. In R.R. Ross and P. Gendreau, eds., *Effective Correctional Treatment.* Toronto: Butterworths.
- Public Agenda Foundation (1987) *Crime and Punishment: The Public's View.* New York: Edna McConnell Clark Foundation.
- Quay, H.C. (1977) The three faces of evaluation: what can be expected to work? *Criminal Justice and Behavior* 4:341-354.
- Ross, R.R., and P. Gendreau (1980) *Effective Correctional Treatment.* 4Scarborough, Ont.: Butterworths.
- Ross, R.R., E.A. Fabiano, and H.B. McKay (1978) Treatment in corrections: requiem for a panacea. *Canadian Journal of Criminology* 20:279-295.
- Sechrest, L., S.O. White, and E.D. Brown (1979) *The Rehabilitation of Criminal Offenders: Problems and Prospects.* Washington, D.C.: National Academy of Sciences.
- Sells, S.B., D. Simpson, G. Joe, R. Demaree, L. Savage, and M.A. Lloyd (1976) National follow-up study to evaluate the effectiveness of drug abuse treatment: A report of cohort 1 of the DARP five years later. *American Journal of Drug and Alcohol Abuse* 3(4):545-556.
- Shearer, A., and J.B. Moore (1978) Personality dimensions of felonious probationers in Texas. Paper presented to the American Society of Criminology, Dallas, Texas.
- Simpson, D.D. (1979) The relation of the time in drug abuse treatment to post treatment outcomes. *American Journal of Psychiatry* 136:1449-1453.
- Simpson, D.D. (1980) *Follow-up Outcomes and Length of the Time Spent in Treatment for Drug Abuse.* Ft. Worth, Tex.: Institute of Behavioral Research, Texas Christian University.
- Simpson, D.D. (1984) National treatment system evaluation based on the Drug Abuse Reporting Program (DARP) followup research. Pp. 29-41 in F.M. Tims and J.P. Ludford, eds., *Drug Abuse Treatment Evaluation: Strategies, Progress and Prospects.* NIDA Research Monograph 51. DHHS Pub. No. (ADM) 84-1239. Rockville, Md.: National Institute on Drug Abuse.
- Simpson, D.D., and J.H. Friend (1988) Legal status and long-term outcomes for addicts in the DARP followup project. Pp. 81-98 in C.G. Leukefeld and F.M. Tims, eds., *Compulsory Treatment of Drug Abuse: Research and Clinical Practice.* NIDA Research Monograph 86. Rockville, Md.: National Institute on Drug Abuse.

- Simpson, D.D., and S.B. Sells (1982) Effectiveness of treatment for drug abuse: an overview of the DARP research program. *Advances in Alcohol & Substance Abuse* 2(1):7-29.
- Spekart, G., and M.D. Anglin (1986) Narcotics use and crime: a causal modeling approach. *Journal of Quantitative Criminology* 2:3-28.
- Strug, D.L., E.D. Wish, B.D. Johnson, K. Anderson, and T. Miller (1984) The role of alcohol in the crimes of heroin abusers. *Crime and Delinquency* 30(4):551-567.
- System Sciences, Inc. (1973) A comparative analysis of twenty-four therapeutic communities in New York City. Prepared for the Addiction Services Agency of the City of New York, December.
- Tims, F.M., and J.P. Ludford (1984) *Drug Abuse Treatment Evaluation: Strategies, Progress and Prospects*. NIDA Research Monograph 51. DHHS Pub. No (ADM) 84-1349. Rockville, Md.: National Institute on Drug Abuse.
- Toborg, M.A., J.B. Bellassai, A.M.J. Yezer, J. Carver, J. Clarke, and E. Pears (1986) The Washington, D.C. urine testing program for arrestees and defendants awaiting trial: a summary of interim findings. Toborg Associates, Washington, D.C.
- Van Voorhis, P. (1987) Correctional effectiveness: the high cost of ignoring success. *Federal Probation* 51(March):56-62.
- Vigdal, G.L., and D.W. Stadler (1989) Controlling inmate drug use: cut consumption by reducing demand. *Corrections Today* 51(3):96-97.
- Wexler, H.K. (1986) Therapeutic communities within prisons. Pp. 227-237 in G. De Leon and J. Ziegenfuss, Jr., eds., *Therapeutic Communities for Addictions*. Springfield, Ill.: Charles C Thomas.
- Wexler, H.K., and J. Chin (1981) Evaluation of a system to evaluate prison based drug treatment. Paper presented at the Eastern Evaluation Research Society Conference, Philadelphia.
- Wexler, H.K., and V.A. Lostlen (1979) Implementation of a prison therapeutic community for substance abusers: an environmental evaluation. Paper presented at the Eastern Psychological Association, Philadelphia.
- Wexler, H.K., and R. Williams (1986) The Stay'n Out therapeutic community: prison treatment for substance abusers. *Journal of Psychoactive Drugs* 18(3):221-230.
- Wexler, H.K., D.S. Lipton, and B.D. Johnson (1988a) *A Criminal Justice System Strategy for Treating Cocaine-Heroin Abusing Offenders in Custody*. Washington, D.C.: U.S. Department of Justice.
- Wexler, H.K., G.P. Falkin, and D.S. Lipton (1988b) *A Model Prison Rehabilitation Program: An Evaluation of the Stay'n Out Therapeutic Community*. New York: Narcotic and Drug Research, Inc.
- Wexler, H.K., G.P. Falkin, and D.S. Lipton (1990) Outcome evaluation of a prison therapeutic community for substance abuse treatment. *Criminal Justice and Behavior* 17(1):71-92.
- Wish, E.D., E. Brady, and M. Cuadrado (1984) Drug use and crime in arrestees in Manhattan. Paper presented at the 47th Meeting of the Committee on Problems of Drug Dependence. Narcotic and Drug Research, Inc., New York.
- Wish, E.D., and B.D. Johnson (1986) The impact of substance abuse on criminal careers. Pp. 52-58 in A. Blumstein et al., eds., *Criminal Careers and Career Criminals*, Vol. 2. Washington, D.C.: National Academy Press.

## **COURTS, JAILS, AND DRUG TREATMENT IN A CALIFORNIA COUNTY**

*Mary Dana Phillips*

No understanding of the contemporary drug scene in the United States can be achieved without focusing in part on the role of the criminal justice system. Large numbers of drug users and addicts are processed through various phases of the system at one time or another (Peterson, 1974; Weissman and DuPont, 1983; Bureau of Justice Statistics, 1983), and there is an important body of research on the extent of drug use among arrestees, felons, and misdemeanants convicted on drug law violations and drug-related criminal activity, on jail and prison inmates with histories of drug use, and on the criminal records of drug treatment clients (Allison and Hubbard, 1985; Flanagan and Jamieson, 1988; Hubbard et al., 1989). So intertwined are the treatment and justice systems that the goals of drug treatment often directly include the elimination or reduction of criminal activity.

It is difficult to say with precision what proportion of all drug users are involved with the criminal justice system. Although the numbers of individuals arrested and prosecuted for illicit drug involvement are widely used as indicators of the prevalence and severity of the drug problem (Gandossy et al., 1980; Gropper, 1984), these numbers are equally a measure of law enforcement priorities and resources (Sloan, 1980; Krivanek, 1988). The direction of the relationship between drugs and crime--which comes first and which causes the other--continues to be contested (Watters et al., 1985; Inciardi, 1987).

The developing interface between the criminal justice system and community and institutional treatment programs poses a number of practical and philosophical questions. By most accounts, drug use constitutes an ever-increasing problem

for the community and for law enforcement, adjudication, and corrections. This trend has three corollaries in recent history: (1) more offenses are seen to be "caused" by drugs; (2) drug and drug-related offenses, as such, are contributing more and more clients to the justice system; and (3) drug treatment is increasingly being sought as an adjunct or alternative to conventional punishment. Whereas public concern over drug-generated offenses has led to a stiffening of sentencing practices and contributed to the crowding of courts and detention facilities, programs that provide treatment and education for addicts and other users are often substituted for regular detention.

This paper offers a preliminary look at the overlap and connections between the criminal justice system and publicly supported drug treatment, assessing at the county level the appropriateness of the relationships between the justice system, drug users, and treatment programs. Although the two systems often work in parallel to handle drug-using persons, choosing from a complex set of alternative responses to particular circumstances, the two systems diverge in orientation and mission: one is designed to render judgment and due punishment according to a moral and legal code, the other to provide diagnostic and therapeutic services for a quasi-medical condition using scientific and clinical principles. The result is tension: political, philosophical, ethical, and instrumental. The recent "drug wars" increase the pressure on both systems to provide winning solutions. There is confusion as to how a person and a problem are to be defined; it is unclear how and when the definition (and thus, solution) changes from a criminal to a therapeutic one. There are different standards applied in different jurisdictions and even within jurisdictions at different administrative levels. Mandates to treatment, like many other judicial mandates, are subject to much local discretion and variability, in terms of selection criteria, sanction patterns,

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procedures, and the balance between the civil liberties of the individual and the prerogatives of the state (Kittrie, 1971; Wexler, 1973; President's Commission on Mental Health, 1978; Weissman and DuPont, 1982; Brown et al., 1987).

This paper seeks to provide a level of historical perspective to set the stage for a detailed case study analysis. It discusses the statutes that guide the criminal justice/drug treatment interface, the typical practices of the personnel within the systems, and the larger criminal justice and drug treatment ecologies in which they operate. There is reference to the drug treatment literature, the criminological literature on the emergence of alternatives to incarceration, discussions in both literatures on the specifics of the involvement of the two systems, and federal policy-setting documents, such as the papers from the Second National Commission on Marihuana and Drug Abuse (1973a,b,c), the task panel reports to the President's Commission on Mental Health (1978), and the report from the White House Conference for a Drug Free America (1988).

Data for the case study were taken from in-depth interviews with representatives of the criminal justice and drug treatment systems and various state and county statistical and substantive reports. The case study provides a detailed view of a particular region, its statutes and processes, and the gaps that tend to exist between theory and practice. State and local governments have substantial autonomy with regard to how they apprehend and behave toward drug-involved offenders. In-depth exploration of a county jurisdiction reveals both the strengths and weaknesses of its response to drug users. The overwhelming crowding of the courts and detention facilities, the lack of suitable or effective treatment for inmates, and the underuse of community programs--which stems in part from the need for more and different levels of treatment and other supportive services to augment these programs--have policy implications for the county.

## THE NEXUS BETWEEN THE DRUG TREATMENT AND CRIMINAL JUSTICE SYSTEMS

Treatment provision has widened into a "two-worlds" model: one system is for those who have private insurance or can otherwise afford to pay; the other system is funded with public money and designed to treat citizens who cannot pay to receive services. Because publicly funded drug treatment capabilities currently fall short of the demand for services, citizens who cannot pay for their own treatment compete in a stream of referrals from the criminal justice, social welfare, and mental health systems. Only a fraction of those seeking such help can find a timely slot in the publicly funded programs that are squeezed for staff, facilities, and support from the communities they are supposed to serve. Client mixes in drug treatment programs have for years been a combination of people experiencing varying degrees of coercion or motivation to avoid criminal sanctions, but there is an argument to be made for paying closer attention to the composition of the client pool in treatment. Pressure from one's doctor, family, or employer to participate in treatment is symbolically and instrumentally different from a judicial motion to enroll in a program. It is not currently known, however, what effect the proportions of criminal justice-referred and noncriminal justice-referred clients have on treatment experience and outcome (Stitzer and McCaul, 1987; Nurco et al., 1988).

Formal control is the cornerstone of public policy regarding drug-dependent and drug-using persons, and the judicial system has been relied on in a variety of ways to secure and maintain such control. There is a resurgence of interest now in adapting the justice system to assume the task of channeling persons into drug treatment. The issues raised by this linkage were highlighted in the report presented by the Liaison Task Panel on Psychoactive Drug Use/Misuse to the President's Commission on Mental Health (1978:2118):

Today, the drug treatment system is caught in a fundamental conflict about "what is being treated". The basic confusion commences with the unwillingness of the formal institutional structures to explore the boundaries between psychoactive drug use and misuse. Even that separation is further confused by the question of who decides what the adverse consequences are: the patient, the physician or counselor, or a variety of agencies affiliated with the criminal justice system. The law enforcement establishment circularly labels all use of illegal psychoactive substances as misuse or "abuse," and the medical establishment labels all nonmedical use of psychoactive substances as misuse. Thus, by definition, psychoactive drug use is seen as demanding legal intervention and medical treatment.

The controversy generated by these authors in 1978 remains vigorous (see Anglin [1988] and Leukefeld and Tims [1988] for recent articles covering a range of opinions). Current interest in drug use and drug users is reflected by the regular and frequent discussions of them in the media and by national and local policymakers.

## HISTORICAL PERSPECTIVES

The connection between the drug treatment system and the criminal justice system is longstanding and complicated. A chronological overview of some of the major legislative, judicial, medical, and social developments of the last century helps to set the scene for a more informed discussion of the present. Several pieces by Weissman detail the history of these developments, and an overview may be found in *Drug Abuse, the Law and Treatment Alternatives* (Weissman, 1978a; see also Duster, 1970; Musto, 1973a,b; Brecher, 1972; and Inciardi and Chambers, 1974). For a history of opiate addiction in America before 1940, see Courtwright (1982) and Terry and Pellens (1928).

### The Criminalization of Drugs

During most of the nineteenth century, all drugs in the United States were licit, including opium, morphine, cocaine, and marijuana, and could be legally sold (Terry and Pellens, 1928; Brecher, 1972); regulation and criminalization occurred in the early decades of the twentieth century (Duster, 1970; Courtwright, 1982). In 1914, largely in

response to treaty obligations derived from ratification of the Hague Convention of 1912, Congress passed the Harrison Narcotic Act (Brecher, 1972; Weissman, 1978a). This act relied on federal customs and excise tax power to require manufacturers, distributors, and dispensers of opiates and coca products to register with the Treasury Department and to keep records of transactions involving these substances (King, 1974). As interpreted in the years after its passage, the Harrison Act in effect criminalized possession, use, and sale of opiates and cocaine for nonmedical purposes; it was the first time in the United States that criminal sanctions were uniformly imposed (Weissman, 1978a). Because doctors were not permitted to administer controlled substances to patients merely to maintain addiction, addicts were cut off entirely from all sources of legal (medical) relief. "Exit the addict-patient; enter the addict-criminal" (King, 1974).

The resultant generational change in the identity of a typical American opiate addict over the last century has been documented repeatedly (Musto, 1973a; Courtwright, 1982). The addicted population of the late nineteenth century was mostly middle-aged, middle-class, small-town white women. It became largely lower class urban males by roughly 1940, often of criminal occupations (Fort, 1968; Courtwright, 1982). Courtwright's view is that the transformation of the American addict was also a function of prevailing medical practices over time: addicts were common in the nineteenth century mainly as a result of physicians' wide use of opiate-based medicines. Patterns of nonmedically induced drug use also began in the nineteenth century but did not account for the bulk of the addicted or drug-using population until after the criminalization of drug use had already begun (Fort, 1968; Duster, 1970). Shifting medical therapies reduced reliance on opium derivatives; the concurrent shifts in American policies toward narcotic addiction, addicts, and users "paralleled and were entirely consistent with the independent and underlying transformation of the addict population" for nonlegal reasons (Courtwright, 1982:4).

Lindesmith, King, Trebach, Brecher, and others have advanced the view that the transformation of the American addict population was a function of abrupt changes in the legal status of the addict. The Harrison Narcotic Act of 1914 forced those who sought narcotics to turn to nonmedical supplies of opiates and increased the likelihood of association with other criminal activities. "The government's anti-maintenance policy succeeded in making a bad situation worse: criminal activity was at least in part a function of [high] black-market prices" (Courtwright, 1982:147). Supreme Court and Treasury Department decisions between 1919 and 1923 established a policy of virtual prohibition that included strict regulation of prescription drugs and criminal sanctions for use of illegal drugs or for illegal use of medicinal drugs (King, 1974; Weissman, 1978a; Courtwright, 1982).

From this time on, drug users and sellers began to constitute a considerable proportion of all those arrested at the federal level (Klein, 1983). Treatment for addicted persons began as a response to the "choking of federal prisons with addict-criminals" (King, 1974). In 1929, in part to relieve the crowding of federal prisons with drug law violators, the Public Health Service and the Bureau of Prisons received congressional authorization to open two narcotic farms: one in Lexington, which was opened in 1935, and one in Fort Worth, which was opened in 1938 (King, 1974; Weissman, 1978a). Addicted persons convicted in federal courts could be sent to these Public Health Service prison hospitals in lieu of ordinary imprisonment (King, 1974). Although the hospitals also accepted voluntary clients, they were run as medium-security penal institutions and had both rehabilitative and addiction research purposes (King, 1974; Weissman, 1978). The criminal justice system and the drug treatment system have "shared" clients, then, ever since punishment became an option for drug addicts in the United States. Some writers have categorized the criminal justice system as the drug treatment system's "main casefinding mechanism" (President's Commission on Mental Health, 1978; Klein, 1983).

In 1930 Congress replaced the scandal-ridden Narcotic Unit within the Treasury Department's Bureau of Prohibition with the Federal Bureau of Narcotics (King, 1974; Weissman, 1978; Courtwright, 1982). Harry Anslinger was its director until 1962, a period Musto has called "the peak of punitive legislation against drug addiction in the United States" (Musto, 1973a). Mandatory minimum penalties were common for drug offenders; most were not remanded to the farms but to traditional incarcerated settings with other criminals.

Except for heroin, the prescription of narcotics remained legal in the United States. After 1914 some addicts were able to obtain drugs from physicians by exhibiting "symptoms" of an illness. Physicians were under pressure to demonstrate the legitimacy of the patient's condition for whom narcotics were prescribed. At the same time a subculture of users and addicts relied on imported heroin or illegally obtained but legally manufactured pharmaceuticals. Many of the drug users and addicts who were arrested and channeled into the criminal justice system until the 1960s were also found to be heavily involved in other forms of criminal activity.

### Reforming Drug Policy in the 1960s

The 1960s were a decade of experimentation, both on the part of drug users and on the part of drug policy administrators. One manifestation of this prevailing mood was the report, *Drug Addiction: Crime or Disease?* issued in 1961 by the Joint Committee of the American Bar Association and the American Medical Association on Narcotic Drugs. Heavily indebted to the work of Indiana University sociologist Alfred Lindesmith (1965), it called for an open and, when necessary, critical discussion of the current policies and laws governing the handling of narcotic substances and those who used them. Without attempting to provide solutions, it reflected "a degree of dissatisfaction within the legal and medical professions concerning current policies which tend to emphasize repression and prohibition to the exclusion of other possible methods of dealing with addicts and drug traffic" (Joint Committee of

the American Bar Association and the American Medical Association on Narcotic Drugs, 1961:161). Some of the report's conclusions were that medicine and public health could be called on to make greater contributions to the handling of drug-involved offenders, the prevention of problems needed a place in the debate, and outpatient or community-based care ought to be explored. Overall, more research was needed, especially to explore an expansion of treatment services and to establish a basis for more balanced and informed debate.

The White House Conference on Narcotics and Drug Abuse was convened in 1962, and rehabilitation rather than punishment emerged as its theme (Weissman, 1978a). Lindesmith's classic contribution to the debate, *The Addict and the Law*, appeared in 1965. It highlighted the subtle and complex nature of the issues that frame whether drug users are treated as criminals or as individuals with a disease. In addition, it provided further intellectual inspiration to the energies then moving toward reform.

In 1961 California authorized the involuntary civil commitment of narcotics addicts in need of treatment. The use of coercion to induce treatment became sanctioned by the judicial system; accordingly, the treatment that was delivered retained a more punitive than therapeutic tint. In California the Civil Addict Program was administered by the Department of Corrections and not by a health or drug and alcohol department.

Early California rehabilitation legislation had two main emphases: (1) short-term crisis intervention and detoxification programs in the community for gravely disabled drug-dependent persons, and (2) long-term post-conviction inpatient treatment and closely supervised parole (under the Department of Corrections) for addicts only. Legislation in 1972 encouraged multimodality community-based outpatient and inpatient programs, including methadone maintenance. This legislation (partly reflected in current California statutes--see Appendix A) also provided for diversion into treatment of drug law violators from the criminal justice system; it has since been expanded to allow

diversion of people with other types of offenses as well (Second National Commission on Marihuana and Drug Abuse, 1973a).

New York passed a similar law in 1962. Similar federal legislation, the Narcotic Addict Rehabilitation Act (NARA) of 1966, also set the stage for massive federal funding of treatment programs in the 1970s. This legislation provided more broadly for civil commitment as an alternative to prison. NARA authorized (1) pretrial civil commitment in lieu of prosecution for persons charged with certain nonviolent, nontrafficking federal crimes who could convince a federal district attorney that they were addicted but had a high probability of rehabilitation; (2) voluntary civil commitment for addicts not under criminal charges, a program administered by the National Institute of Mental Health; and (3) sentencing of some addicts convicted of certain federal crimes to commitment for treatment, a program administered by the Bureau of Prisons. The clients of the latter were treated in selected prisons and could then be paroled to outpatient care in the community. NARA also authorized federal grants to communities to fund treatment programs for addicts (Bonnie and Sonnereich, 1973; King, 1974; Maddux, 1988).

According to the report and appendices of the Second National Commission on Marihuana and Drug Abuse (1973a,b,c), civil commitment is not a treatment mechanism as such but rather a mechanism for retaining and supervising individuals while they participate in a course of treatment. It is in this enforced and prolonged supervision that it differs chiefly from voluntary programs. Maddux (1988) has recently reviewed 50 years of clinical experience with addicts in treatment, including those being treated voluntarily, those under various criminal law coercions, and those under civil commitment, using data from the U.S. Public Health Service hospitals and from NARA. He concludes that civil commitment brings people into treatment who might not otherwise get there. But it cannot assure their participation, it cannot overcome deficits in services, and it remains restricted by constitutional guarantees of individual liberty (Maddux, 1988).

The shift to view addiction as a health issue rather than (only) a criminal or moral issue was well under way by the mid-1960s. The idea that intractable social problems--such as drug problems--undergo periodic redefinition and are turned over to or are shared by different social institutions and occupations has been developed extensively in the literature (Gusfield, 1967; Pitts, 1968; Brüün, 1971; Room, 1978). This change in perspective led to what has been called "the medicalization of deviance" (Gusfield, 1967; Pitts, 1968; President's Commission on Mental Health, 1978; Conrad and Schneider, 1980): the identified "deviant" is committed to a hospital instead of a prison, and the objective becomes curing rather than punishing (Wexler, 1973; Glaser, 1974; see Kittrie, 1971, for a detailed legal and philosophical history of these shifts).

This reaction to some but not all types of drug addicts and users accelerated rapidly after 1962, when *Robinson v. California* was decided by the Supreme Court. The case involved an appeal from a misdemeanor conviction under a statute that made it unlawful to be "addicted to narcotics." The Supreme Court held that to penalize an addict was a violation of the Eighth Amendment provision against cruel and unusual punishment: the conviction was not based on anything the defendant had done but on his illness (Sloan, 1980); the statute was thus ruled unconstitutional. The ruling also suggested that it would be legitimate to declare addiction a disease justifying civil commitment (Glaser, 1974).

During the 1960s the amounts and types of drug use, and the ways people were using drugs, as well as the social class of users, changed as well. Drug users were no longer exclusively associated with patterns of frequent street crime. Experimentation with a variety of substances, including marijuana, LSD, amphetamines, and prescription pharmaceuticals, became widespread. People from middle and upper class backgrounds joined the ranks of those who used a variety of licit and illicit substances for pleasure, or "kicks," as well as for generational symbolism, including displaying disapproval of the mores of society and the policies of government.

The criminal justice system itself was in the throes of upheaval and experiencing a period of disenchantment with traditional practices and their underlying philosophies. This was a time of riots in the prisons and exposés in the media of cruel and unusual conditions within them (Packer, 1968; Goldfarb, 1975; Feeley, 1983). High rates of criminal recidivism among drug users and a continuing rise in the cost, frequency, and seriousness of crime linked to drug users frustrated officials and perhaps encouraged them to try something else (Ohlin, 1973; Weissman, 1978). A philosophy that proposed humane rehabilitation and opportunities for treatment in place of deprivation and incarceration for those whose criminality could be linked to drug use found resonance in a criminal justice system looking for alternatives to traditional but unsuccessful methods (Jaffe, 1979).

Treatment approaches for drug users, especially heroin addicts, expanded as a part of a "war on heroin" and, more generally, reactions against drugs, crime, and accompanying lifestyles (Second National Commission on Marijuana and Drug Abuse, 1973a; Klein, 1983). Law and order campaigns in the late 1960s and early 1970s drew support from the fears of a voting populace that had been assailed by anti-Vietnam war activities, the civil rights movement, student unrest, and more broadly defined cultural shifts among youth with respect to both drug use and sexual behavior.

Treatment provided opportunities for recovery and incorporated more progressive methods of dealing with drug users than imprisoning them. Nonetheless, treatment was also seen as a way of maintaining careful supervision of drug-involved offenders, only partially extricating them from the traditional criminal justice system. The Nixon administration's "War on Drugs" had weapons to reduce the supply side, including the Drug Enforcement Agency to interdict imported substances, and "get-tough" laws to reduce the "demand" side through the detection and punishment of users and the deterrence of future consumers.

At the same time there was substantial growth in the federally and state-funded social service apparatus. Demarcations between treatment as a part of the social welfare and health care systems and the criminal justice system were becoming less clear. "Community-based" programs were favored over incarcerative models for juvenile delinquency prevention, health (especially mental health) care, and other public services (Fox, 1973; Wexler, 1978). Both political and fiscal considerations were at work here; decarceration was envisioned as more efficient, serving more people per dollar. The local service providers welcomed a chance to provide flexible care at the local level where they had greater authority and discretion. This marriage between community care providers and judicial system referral mechanisms resulted in a vast network of treatment opportunities for people whose original interaction was with the justice system. The marriage was paid for by federal-state cost sharing during the early 1970s.

### **Diversion from the Criminal Justice System to Treatment in the 1970s**

The demand for policy alternatives offering the penal features of criminal law but the therapeutic features of health care had been building for half a century. The growth of the federally funded system of community-based programs authorized by NARA and later by the National Institute on Drug Abuse (NIDA) made the practice of court referral of addicts to community treatment a commonplace. In 1972, through the efforts of the Special Action Office for Drug Abuse Prevention (located in the Executive Office of then-President Richard Nixon), the routing of addicts to treatment was further increased by the referral of unsentenced defendants to community-based treatment in lieu of prosecution. This move was based on the assumed causal relationship between drug taking and criminal behavior. It was buttressed by a coexisting belief that treatment was beneficial for drug-dependent persons, whether such treatment occurred voluntarily or involuntarily (Smith, 1974). This system interface--and the assumptions underlying it--remains at the heart of the national approach to drug users.

Diversion at the pretrial stage of the adjudication process was made possible in the United States by recommendations of the President's Commission on Law Enforcement. The commission proposed the practice in 1967, claiming that "it is more fruitful to discuss, not who can be tried and convicted as a matter of law, but how the offices of the administration of criminal justice should deal with people who present special needs and problems. . .[the solution being] the early identification and diversion to other community resources of those offenders in need of treatment, for whom full criminal disposition does not appear required" (President's Commission of Law Enforcement and Administration of Justice, 1967:134). Diversion was originally designed for alcohol-involved offenders and people with chronic mental problems, but it quickly became popular for a variety of dispositions. These offenders were seen to be burdensome to the criminal justice system, preventing it from catching and punishing "real" criminals more efficiently. Moreover, in the words of two veterans of the American judicial system, it offered "the promise of the best of both worlds: cost savings, along with rehabilitation and more humane treatment" (Vorenberg and Vorenberg, 1973; see also the *Yale Law Journal*, [1974]).

The classical definition of diversion is therapeutic intervention that takes place following arrest but before either a trial or adjudication. Several of the papers found in the appendices to the report of the Second National Commission on Marihuana and Drug Abuse (1973b,c) include the following procedures as falling under the category of diversion:

- (1) pre-arrest, formally authorized diversion for purposes of detoxification or withdrawal;
- (2) postarrest, diversion to detox;
- (3) treatment as a condition of pretrial release;
- (4) emergency treatment while awaiting trial;

- (5) treatment in lieu of prosecution;
- (6) treatment as a condition of deferred entry of a judgment of guilt and conditional discharge, or as a condition of suspension of sentence or probation;
- (7) treatment as a condition of probation or parole; and
- (8) commitment for treatment in lieu of other sentence, or while serving a sentence in a correctional facility or following administrative transfer from a penal institution.

Nationwide, procedures at the local court level that may be formally designated or loosely categorized as "diversionary" are many and varied. Diversion programs vary not only with respect to a lack of uniformity of procedures but also in the extent to which the defendant penetrates the criminal justice system, a factor that may vary even within states by county or judicial jurisdictions (Carter, 1972; Agopian, 1977; Weissman, 1978b; 1979; Gottlieb, 1985). Specific operations may be driven in part by legal or policy considerations, fiscal realities, the relative climate of the local courts, and the size and schedules of their caseloads. Some diversionary procedures derive their authority from statute law, whereas others rely on court rules or prosecutorial discretion. However indirectly, all rely on the existence of (and availability of space within) treatment programs. Most diversion programs seem to share certain goals and principles. These include the early identification and referral to treatment of drug-involved offenders, goals that allow the workload imposed on the criminal justice system to be reduced by the volume of drug-related cases that are dispensed with in an alternative fashion.

At its best, diversion allows the court to recognize the seriousness of official concern for certain offenses while retaining a flexible range of alternative sentencing measures at the pretrial stage of the proceedings. It was designed to benefit the defendant, prosecutors, the court, and the community. As an alternative to standard options,

diversion is also appealing because it represents a continuing attempt to structure and make visible many informal prosecutorial practices found across a range of dispositions. It may also be submitted as evidence of an ideological shift in emphasis from deterrence to rehabilitation; pretrial diversion minimizes penetration into the formal processes of the justice system. As a result, diversion is endorsed as a process capable of avoiding the stigmatizing experiences of traditional justice system processing.

Diversion, not unlike probation, may be seen as both an exchange and as a sentencing process. As in plea bargaining, there is a "legitimate exchange of tactical concessions to the mutual advantage of the defense and the prosecution" (*Yale Law Journal*, 1974:843). Diverted cases and defendants allow costs associated with traditional adjudicatory and correctional practices to be averted. Society in turn is expected to benefit from reduced recidivism rates linked to diversionary practices that are characterized as therapeutic rather than punitive.

At its worst, diversion may be viewed as a supralegal mechanism, a tool available to the court to dispose of defendants and cases using alternative strategies that do not uniformly adhere to laws and procedures specifically in place to protect defendants' civil liberties (Second National Commission on Marihuana and Drug Abuse, 1973a,b,c; Senay et al., 1974; *Yale Law Journal*, 1974; Alper and Nichols, 1981; Harrington, 1985). Critics of diversion share common concerns about the guarantee of due process rights during diversion procedures, which stem in part from the enormous variance in the extent to which defendants penetrate the system. A failure in the adjudication process to define clear boundaries that are explicitly linked to judicial practices and based in the law often allows unpredictable and even disturbing levels of discretion to be exercised by the courts. Violations of due process are best prevented through the systematic use of procedural safeguards that are explicitly required and based in constitutional law and that are comprehensive with regard to the shifting patterns of diversionary cases and clients (Klapmuts, 1974; Harrington, 1985).

Otherwise, efforts to evaluate diversion programs are placed in a precarious position along with more basic constitutional guarantees. Although diversion programs are not necessarily invalidated by these concerns, procedural safeguards of due process rights are not always fully observed.

Research on police behavior and lower courts in the early 1960s suggested that official attitudes and practices toward defendants were best characterized by a crime control model rather than a due process model (Packer, 1968; Harrington, 1985). The court reforms of the late 1960s to the mid-1970s were concentrated on the lower courts and on delineating the amount of discretion police, prosecutors, and judges had in previously unregulated proceedings. The ideal of diversion is an "attempt to structure and make visible the informal prosecutorial practices on noncriminal disposition" (*Yale Law Journal*, 1974:852). This involved the use of procedural fairness and official guidelines to *control* official discretion, not increase it, and to protect rather than jeopardize individual rights in these situations (Harrington, 1985). Thus, diversion was not just "a unique approach to the management of deviance but an essential part of a much broader movement of social and criminal justice reform" (Klapmuts, 1974).

The rapid and sweeping moves of federal and state governments to establish and support diversion programs represent a convergence of several complementary forces. Discussions were held in 1971 by the Law Enforcement Assistance Administration, the White House's Special Action Office for Drug Abuse Prevention, and the National Institute of Mental Health's Division of Narcotic Addiction and Drug Abuse (NIDA's predecessor) on how to link treatment and the judicial process, thereby interrupting the relationship between drugs and property crimes (Bureau of Justice Assistance, 1988). The resulting federal initiative, modeled after earlier experiments with diversion projects in New York City and Washington, D.C., was funded under the Drug Abuse Office and Treatment Act of 1972 and was known as Treatment Alternatives to Street Crime (TASC). The program represented a

formalization of various criminal justice pressures to move addicts into treatment and hold them there for as long as was indicated.

TASC components include identification of the drug-dependent offender, *assessment* of the individual's drug dependency and community risk, *referral* to the appropriate community treatment resources, and *case management* of the individual to maintain compliance with justice and treatment criteria (Toborg et al., 1976). When arrested, the suspect is evaluated by a diagnostic unit and held pending transfer to a treatment program. Dropping out of treatment prematurely or any other act of non-compliance is treated by the courts as violation of the conditions of release. TASC program participants are under direct supervision of the court, the treatment program, and the TASC worker assigned to their case. Because of the leniency of some treatments, TASC programs often diverted those who were not addicted to an illicit substance and for whom criminal conviction was seen as too severe, such as occasional users of marijuana.

TASC originally focused on pretrial intervention, but this approach was resisted by some courts and prosecutors and was broadened or constrained according to local preferences (Weissman, 1979). By 1974, each locality was allowed to decide whether screening was to be mandatory or voluntary and to determine eligibility standards, points of referral, choice of treatment modality, and criteria of success (Kadish, 1983). Advocates of the program extol its evolution from originally a heroin addict identification program aimed at crime reduction into a social services and treatment brokerage system for criminal justice adjudicatory and offender-serving agencies (Weissman, 1979).

TASC was funded through the 1970s by both federal and state dollars to the local community, usually either a county or greater municipal area. In an article reviewing every state's drug diversion policies in 1979, Weissman demonstrates the broad discretion states exercised in how programs were administered. The federal government last provided money and specific procedural guidelines

by direct allotment to states or local communities in 1980. Since then, diversity in state and local practices has only increased, as both program rules and funds are no longer directly overseen by a federal body that provides some measure of uniformity. TASC money became part of what is still available under the federal block grant program, but there is enormous variation in programs and program components currently in operation and funded by TASC block grants. A broad range of legal, fiscal, and philosophical judicial systems design and administer programs that compete for support. TASC may be seen as successful in the sense that many jurisdictions have continued to offer programs that were begun with pre-block grant federal funds and have received support for them from both state and local government sources (Weissman, 1978b, 1979). Currently, 100 sites in 18 states have programs using the name TASC (Bureau of Justice Assistance, 1988).

There has been no systematic comparison of all these programs with one another, especially to review and evaluate their components and the relative success or failure of services for the drug-involved offender in treatment. The evaluations of some TASC programs point to its ability to keep people in treatment longer, but they do not necessarily show better results once treatment has ended (Bureau of Justice Assistance, 1988). "These studies have also shown that the lack of data collection and evaluation as critical program elements has hindered TASC programming" (Bureau of Justice Assistance, 1988:6).

The TASC philosophy and program components lend themselves to compartmentalization; various combinations of services and functions are adopted by jurisdictions with specific funding or legal restrictions. One part of the TASC program that may be active in one place, such as TASC workers acting as advocates for their clients with the criminal justice system, may not necessarily be found in another (Weissman, 1979). This in fact has been one of the criticisms of the strategy: that it is different everywhere; diversion as part of the

judicial system is under state jurisdiction, and many states in turn give local courts the power to interpret state laws using their own discretion.

Programs described as "diversionary" or "community-based" are potentially more effective in achieving the desired result of rehabilitation. There is no question that a medically managed detoxification is preferable to "sweating it out" in a cell. There is also little doubt that the criminal justice system can introduce people to treatment who might not otherwise ever experience it. Yet the potential for abuse latent within the administrative discretion operationalized in many diversion programs is also real (*Yale Law Journal*, 1974; NIDA, 1978; Toborg, 1981; Mosher, 1983). Hudson and colleagues (1975:19) issue a sharp warning that may yet deserve attention:

[The potential for abuse] is especially the case when clearly articulated and openly established program policies and procedures are lacking. Most diversion programs are viewed as treatment or quasi-treatment alternatives to conventional processing by the criminal justice system. These programs, however, have in common with the criminal justice system a governmental policy aimed at solving social problems by obtaining individual compliance to a given social structure. Given the assumption that most of these programs provide closer surveillance or supervision of their clients, have quicker reactions to client behaviors, and greater political leverage with community decision-makers, what may begin as a benevolent program designed to help the offender could turn into a more oppressive program than the conventional correctional alternative.

The debate about the relative value of mandates to treat drug-involved offenders continues. For more current discussions of diversion, probation and the nexus between the criminal justice and drug treatment systems, see Chambers and coworkers (1987), NIDA Monograph No. 86 (Leukefeld and Tims, 1988), Brown and associates (1987), and the entire issue of the *Journal of Drug Issues* (Anglin, 1988) on the compulsory treatment of opiate dependence. At this juncture, however, it is instructive to turn to the case study of a California county as a critical departure for more general remarks about the pathways to treatment from the criminal justice system.

## CASE STUDY OF A CALIFORNIA COUNTY

The California county analyzed here<sup>1</sup> is a case in which no formal TASC-type program exists to guide the courts and treatment providers as they interpret the laws regarding drug users as the basis for intervention. No formal program has ever existed within this county's criminal justice system to systematically broker for treatment services. This function has always been a part of the domain of the probation department. In contrast to numerous other California counties and administrative regions around the country that have TASC programs or other formal mechanisms that are specifically assigned to the management of criminal justice-referred drug treatment clients, the county's drug treatment system has no personnel, programs, or program components specifically designed to manage criminally involved clients.

The case study site was a choice of convenience. The experiences and practices of a single county are probably neither unique nor typical but representative in a generic way of non-TASC jurisdictions, which constitute the great majority of counties across the country. The purpose of this inquiry is to examine objectively how the criminal justice and drug treatment systems are linked, how the links have withstood or resolved some of the previously identified tensions, and how the "system" continues to function in the absence of a formal arrangement.

Data in this section were drawn from a series of in-depth interviews with administrative officials connected to both systems, as well as with both clients and treatment providers in methadone programs, residential treatment settings, outpatient programs, and two of the county's detention facilities. Other sources include the California State Penal Code and statistical reports compiled by the Judicial Council of California, the California State Department of Justice, the county municipal court system, the probation department, the county's detention facilities, and the Drug Abuse Program administrative office.

Before examining the relationship between the criminal justice and drug treatment systems, it is

helpful to have an overview of the study county. It includes urban, suburban, and rural areas. A full range of socioeconomic statuses can be found in its mix of older industrial towns and neighborhoods as well as in its newer technocratic urban centers and their accompanying housing and commercial developments. Like all California counties, its criminal justice system is governed by the state constitution and laws.

The population of the county was approximately 750,000 in 1987, with nearly 80 percent residing in cities and the remaining 20 percent in unincorporated areas. The majority of the county's residents are white (85 percent), with blacks representing somewhat less than 10 percent of the total. People identifying themselves as being of Spanish origin make up most of the remainder.

The county is characterized by communities in which individuals, no matter what their ethnicity, tend to share socioeconomic status. The mean income of all families was \$30,000 in 1979, but when the population is stratified by race and the mean family income is recalculated, white and Asian families enjoy incomes above the county mean. Black and Native American families and families of Spanish origin have family incomes considerably below the county mean, although only 8 percent of the total county population live below the poverty level. One geographically segregated section of the county also contains a large proportion of minority and poor individuals. One could say that the county is basically a wealthy suburban area with pockets of poverty.

### County Drug Abuse Treatment System

The county Drug Abuse Program is a branch of the Alcohol, Drug Abuse, and Mental Health Division, one of five divisions within the county's Department of Health Services. The drug program administrator reports to the deputy division director and is advised by a drug abuse advisory board. The county-operated drug programs each employ a program director who reports to the drug program administrator. The program directors are

responsible for facility management, staff supervision, and the provision of direct services.

Some programs are run by the county, and others provide services on a contract basis. The budget for all programs was nearly \$2 million for FY 1986-1987. Funding sources for program activities can be broken down as follows: 45 percent state, 23 percent federal, 16 percent Medi-Cal (a California state program roughly similar to Medicare), 3 percent user fees, and 13 percent county funds. The types of services offered in the county are prevention, education, and treatment for youth; prenatal and perinatal educational services for women; and outpatient prevention, education, and some treatment services for parents, families, and some individuals. The Drug Abuse Program Office uses its funds to provide residential treatment (23 percent), methadone treatment (17 percent), and prevention and outpatient counseling services (50 percent); the remaining 10 percent is spent on administration and overhead. The number of county employees working in drug services as of September 1988 was 16. The number of county contractor program employees working in drug services as of September 1988 was 39.

The county provides a range of services in its 11 outpatient counseling and education programs. These include primary prevention and secondary prevention or early intervention with those identified as being at high risk for drug abuse. Targeted clients of these programs tend to be adolescents, other school-aged children and adults who are part of the targeted adolescent's family, and pregnant drug-abusing females. The number of outpatient treatment program admissions for FY 1987-1988 was 693. (This figure does not include those who participated in education and prevention programs.) Of those admissions, 22 percent were black, 68 percent white, and 9 percent Hispanic; 42 percent of the total were women.

The county operates two drug-free adult residential treatment programs, one coed and one for males. Both offer care from 12 to 16 months; the all-male program is licensed for 30 adults, the coed facility, for 15. The number of residential treatment

program admissions for FY 1987-1988 was 167. Of those, 56 percent were black, 39 percent white, and 5 percent Hispanic; 36 percent of the total admissions were women.

Methadone services for both detoxification and maintenance are offered at two sites in the county. Within the last two years the county has introduced a fee-for-service type of payment scheme, quadrupling the number of available slots while cutting the number of publicly supported patients. Of the 150 detox slots, 14 are publicly supported; of the 300 maintenance slots, 140 are paid for by Medi-Cal. The county's methadone budget was cut in half in 1988; it accounts for only 17 percent of all drug treatment monies in the 1988 budget, down from the 35 percent share it had in 1987. For the paying clients, methadone maintenance costs \$165 per month; detox costs \$250 for a 21-day dosing schedule.

The source for the above information is a report commissioned by the Health Services Department and the county's drug abuse advisory board; it includes a multiyear plan for drug abuse services. Some of the report is a series of tally sheets required by the state for funder accountability; much of the rest of it deals with the advisory board's elaborate planning process to meet its goal of a drug-free county. Although some mention was made of monitoring activities to evaluate the progress made toward measurable objectives, neither the report nor the administrator had any data that provided evaluative outcome information. One of the objectives of the report was to evaluate existing services as a part of the planning process. The priorities of the board are reflected in the levels of funding.

The report is inconsistent in several respects. In the first place, one of the indicators cited as proof of the severity of the drug problem is the large number of county residents identified as being at high risk for drug abuse. This group includes people living below the poverty line, especially minorities, disproportionately high numbers of single and divorced persons under age 30, and people who are too old or too young to be in the work force. Yet very few of the planned or extant

services are directed toward these populations. Furthermore, much of the statistical information in the report detailing the county's drug problem was taken from criminal justice system data (reviewed in the next section) and other data estimating the number of current illicit drug users. Very little mention is made in the report of plans to meet the treatment needs of these people.

The problem indicator data do not appear actually to govern the setting of priorities for types and levels of services offered by the county. The bulk of the county's drug budget goes for prevention or education activities aimed at youth and their families who are not identified as necessarily being single or divorced, minority, elderly, between the ages of 15 and 29, or criminally involved. Instead, services are designed for grade school-aged children and their parents. Programs are sited predominantly in middle and upper-class neighborhoods where contributions from the schools augment county efforts. Another goal emphasized in the report was to secure increased funding or to broaden current service delivery through other means, including third-party payments to county-sponsored services, the use of self-help groups as a part of treatment and aftercare, and increasing both public and private funds to service providers.

There is little mention made of criminal justice system referrals to county-funded programs. One out of eight methadone and residential treatment clients' referral sources were reported to be from the criminal justice system. Most program clients were self-referred, even to these modes of treatment for which nationwide the percentage of criminal justice system-referred clients is closer to 50 percent (Hubbard et al., 1989). Commenting on this fact, "[t]he Planning Committee [of the case study county] noted that only a small percentage of the total arrests for drug-related violations were referred for treatment. This is unfortunate as the cost of treatment is lower than the cost of incarceration; and treatment is more likely to assist the person in adopting a productive, crime-free lifestyle." One of the 12 recommendations in the report was to establish 50 long-term and 50 short-term beds for incarcerated individuals in

need of residential treatment, but publicly funded special services neither exist nor were planned for nonincarcerated criminally involved illicit drug users.

There were few data available from the drug abuse treatment system report or from interviews conducted with providers to identify or elaborate the linkages between the drug treatment system and the criminal justice system. For example, the drug abuse program administrator stated his commitment to cooperate with the probation department, but there was no evidence that justice system-referred clients deserved special consideration. The administrator stated that they were evaluated as candidates for treatment along with everyone else; in his mind they were perhaps disadvantaged to the extent that they were often without funds to help pay for their care and were additionally burdened with their criminal records. His feeling was not that drug users identified by the criminal justice system did not need treatment but that he "had his hands full" securing the money to provide the rest of the community with services. No mention was made of potential linkages with the justice system or joint funding schemes to begin to serve criminally involved illicit drug users, despite the stress their presence placed on the county's drug treatment and criminal justice systems.

A worker in one of the methadone clinics mentioned the difficulty of working with criminal justice personnel because of a lack of understanding on their part about methadone treatment. For example, her clinic writes letters verifying the dosing schedule of a client rearrested during treatment, despite the reluctance she senses on the part of the justice system to provide methadone to incarcerated offenders. (According to her, criminal justice personnel view methadone more as a drug and less as a medicine.) She also expressed the need for some of the judges and probation officers to appreciate the different types of treatment that were available as well as what could realistically be expected in terms of progress and outcome for the client-offender. She spoke of trying to explain to criminal justice system personnel, for example, why a drug-free

residential setting was not an appropriate referral for a methadone maintenance client. She said that there had been a movement under way in the county for the last several years in favor of drug-free treatment.

The cut in methadone funding is clearly a reflection of the county planning committee's sense of priorities. The report stated that, although heroin addicts make up a relatively small proportion of the total drug abusers in the county, their treatment had historically consumed a substantial percentage of available county resources. To this trend may be added the increasing popularity of fee-for-service payment schemes in the county, especially for expensive services like methadone. Thus, cuts in the drug budget for publicly supported methadone slots were almost unanimously supported. This sentiment exists in contrast to another priority of the county, which is to provide services to clients with a high risk for HIV (human immunodeficiency virus) infection. Education has been identified as the means to this goal, in place of continuing the previous level of publicly supported methadone slots.

Both people who are diverted from the criminal justice system and those who are given probation as a condition of their release rely predominantly on publicly funded, community-based treatment programs. These are each discussed in turn below. The contradictions implied by the overlap of punitive with therapeutic measures as a response to drug-using offenders in this county are mentioned. They may reflect more general societal confusion regarding the handling of illicit drug users who are apprehended by the criminal justice system.

### **The Criminal Justice System: Processing the Offender**

This section contains a description of the county's criminal justice system, its law enforcement agencies, court system, and detention facilities. It attempts to trace the progression of an offender through the system from the point of initial detention to the time of sentencing. Because the

county has sole jurisdiction over offenders accused and prosecuted in its municipal courts, only those offenders who are processed in this system are discussed. The California state constitution provides the mandate for all its counties to have identical processes for such activities. Many dispositions are available for individuals whose cases are drug related. Here, the focus is on the most common pathways to drug treatment through the criminal justice system rather than the identification of every possible trail or outcome.

The county's criminal justice system is the joint enterprise of a number of interrelated institutions: (1) the police, who apprehend the offender; (2) the judiciary or court, which insures due process; (3) the jail, which detains or incarcerates the individual; (4) the public defender's office or private lawyers (or both), whose task is to defend the accused; (5) the district attorney's office, which prosecutes the accused; and (6) the judge, who determines whether prosecution is proceeding lawfully and then sentences the convicted. Of the county's total criminal justice expenditures for 1986, 54 percent went to law enforcement, 7 percent to prosecution, 3 percent to public defense, 12 percent to courts and court-related matters, and 24 percent to corrections.

The police provide protection for the citizenry, bring charges against putative offenders, and have the power of arrest. The county's chief police officer is the sheriff. The sheriff's office has police jurisdiction over all unincorporated areas of the county and 4 recently incorporated towns that contract for police services from the sheriff's office. There are 11 incorporated areas in the county with independent city police departments. In addition, a variety of special districts or local institutions have autonomous police forces: for example, the California State Police, the California Highway Patrol, community college patrols, regional district park rangers, and railroad and other transportation authority police.

All such police have arrest power, arrest being the act of taking a putative offender into custody--that is, temporarily depriving him or her of liberty. An arrest may occur because a police officer (or a

citizen) has observed an offense or has reason to suspect that someone has committed an offense, or because a warrant for arrest has been issued by the judiciary to the appropriate police department. A citizen may also be taken into temporary custody without an arrest having occurred -- for example, when a person is sought for questioning about some offense and released, or when he or she is taken to the police station but the peace officer determines that there are insufficient grounds for making a criminal complaint and releases the individual.

A little more than 3 percent of all adults in the county were arrested for misdemeanor offenses in 1986, a proportion that stayed roughly equivalent in 1987 and 1988. Of the total number of adult misdemeanor arrest offenses reported by law enforcement agencies in the county in 1986, 7.9 percent were released at the police level, and misdemeanor complaints were sought in 92.1 percent of the cases. More than 16 percent of the people arrested for a misdemeanor offense were women.

The various stages of the criminal justice system through which a person must pass appear in Figure 1. The first opportunity for diversion from the system occurs during the prearrest phase. The arresting officer determines that the person in custody is in need of detoxification from drugs or alcohol, or both; California law allows for that person to be taken to a legitimate facility for detox services. However, a police officer may still lodge a complaint against a person who is suffering from an illicit drug overdose or drug-related medical problem even if they are delivered to a hospital or clinic because drug use itself constitutes a violation of the drug laws and is thus regarded as a crime. (The same is not true for alcohol intoxication because alcohol is legal.) There are scores of specific laws concerned with the use of illicit drugs and the misuse of licit drugs in the various California codes, including the Penal Code, the Health and Safety Code, the Motor Vehicle Code, and the Business and Professions Code.

Whether or not an arrest has occurred, technically speaking, a putative offender who has been

deprived of liberty is detained either in a city lock-up (in one of the 11 incorporated municipalities with independent police departments) or at the main county holding facility. Currently, many misdemeanants are charged and released without being taken into custody, a procedure known as a "cite release." After being taken into custody, the citizen may be (1) booked, issued a "Notice to Appear," and then released, (2) booked, held in custody until a bail amount is set at a hearing, and then released when bail is paid, or (3) booked and held in custody until arraignment. The admission of the citizen into the jail--whether he or she is held or later released--is called the "booking."

The next step in processing is arraignment, a judicial proceeding in which the accused citizen is formally charged with an offense in public court by the district attorney's office. It is the initial court appearance of a person charged with a crime. When the charges involve misdemeanor offenses the case remains in the lower, or municipal, court.

Felonies refer to all offenses punishable by imprisonment in a state prison or by death, including certain crimes charged under the Vehicle Code. Such complaints are filed in municipal courts for a preliminary hearing to determine if there is sufficient evidence to adjudicate the offense in a superior court. Even when the case is consigned to a higher court, it may be reintroduced at the lower court level if the felony charges are reduced to misdemeanor charges (indicated by arrows on Figure 1).

The county is divided into four judicial districts or municipal court jurisdictions in which all arraignments occur. The State Code requires the district attorney to evaluate information provided by the arresting officer and to decide whether to prosecute or bring to trial the person charged with or reasonably suspected of the offense. Thus, not everyone who is detained is technically arrested and booked, but everyone who is booked is arraigned. At the time of arraignment the district attorney may dismiss the charges against the defendant because of improper arrest procedures or

insufficient evidence to prosecute, or if so instructed by the court.

At arraignment the defendant is given a chance to plead and to designate a private defense attorney or request that a public defender be appointed by the court. One may (1) "plead out," or plead guilty immediately; (2) defer the plea until counsel has been procured by "standing mute," which is the same as pleading not guilty; or (3) plead not guilty. In addition to dismissal, other misdemeanor cases are disposed of during arraignment through bail forfeiture, actions after pleas of guilty, or by transfer to another court. After arraignment, the court sets a date for another hearing, either to hear evidence by the prosecuting and/or defending attorneys or for sentencing, depending on the plea.

It is at this point that presentencing diversion is possible at both the felony and misdemeanor levels. In California, diversion is an official disposition that occurs prior to the trial and involves a special proceeding, governed by legislation passed in 1972. The district attorney determines when the diversion provisions apply to the defendant and must advise the defendant and his or her attorney in writing of such a decision. The eligibility of the defendant is restricted by the nature of the drug-involved offense, by what violations to certain codes have occurred, and in what combination with other offenses. By law, defendants must meet the six requirements outlined in Penal Code chapter 2.5, "Special Proceedings in Narcotics and Drug Abuse Cases" article 1000, subdivision (a):

- (1) The defendant has no conviction for any offense involving controlled substances prior to the alleged commission of the charged divertible offense.
- (2) The offense charged did not involve a crime of violence or threatened violence.
- (3) There is no evidence of a violation relating to narcotics or restricted

dangerous drugs other than a violation of the sections listed in this subdivision.

- (4) The defendant's record does not indicate that probation or parole has ever been revoked without thereafter being completed.
- (5) The defendant's record does not indicate that he or she has been diverted pursuant to this chapter within five years prior to the alleged commission of the charged divertible offense.
- (6) The defendant has no prior felony conviction within five years prior to the alleged commission of the charged divertible offense.

Drug diversion was intended for those users of illicit drugs who are, as one probation officer said, "not immersed in the drug culture; it's for the recreational users. . ." Illicit drug traffickers or those suspected of heavy selling activities are considered to be too far along--both in their criminal activities and in the amount of drugs they are suspected of using--to be candidates for diversion.

A defendant may attempt to qualify for diversion by self-enrolling in a treatment program, but more often the court or the defense attorney initiates the action by requesting that the district attorney begin eligibility proceedings. The case is always referred to the probation department where the defendant's suitability for education, treatment, or rehabilitation is assessed. This assessment is provided in written form and is called the pre-sentence investigation report. Sometimes the pre-sentence report discloses information such as prior convictions for certain offenses or a record of a failed probation that renders the defendant ineligible for diversion. All of the county's reports are handled by one section of the probation department and contain the probation officer's findings, which are presented to the court with a recommendation. The district attorney must agree to the diversion disposition, but the court makes the final determination regarding the terms of the

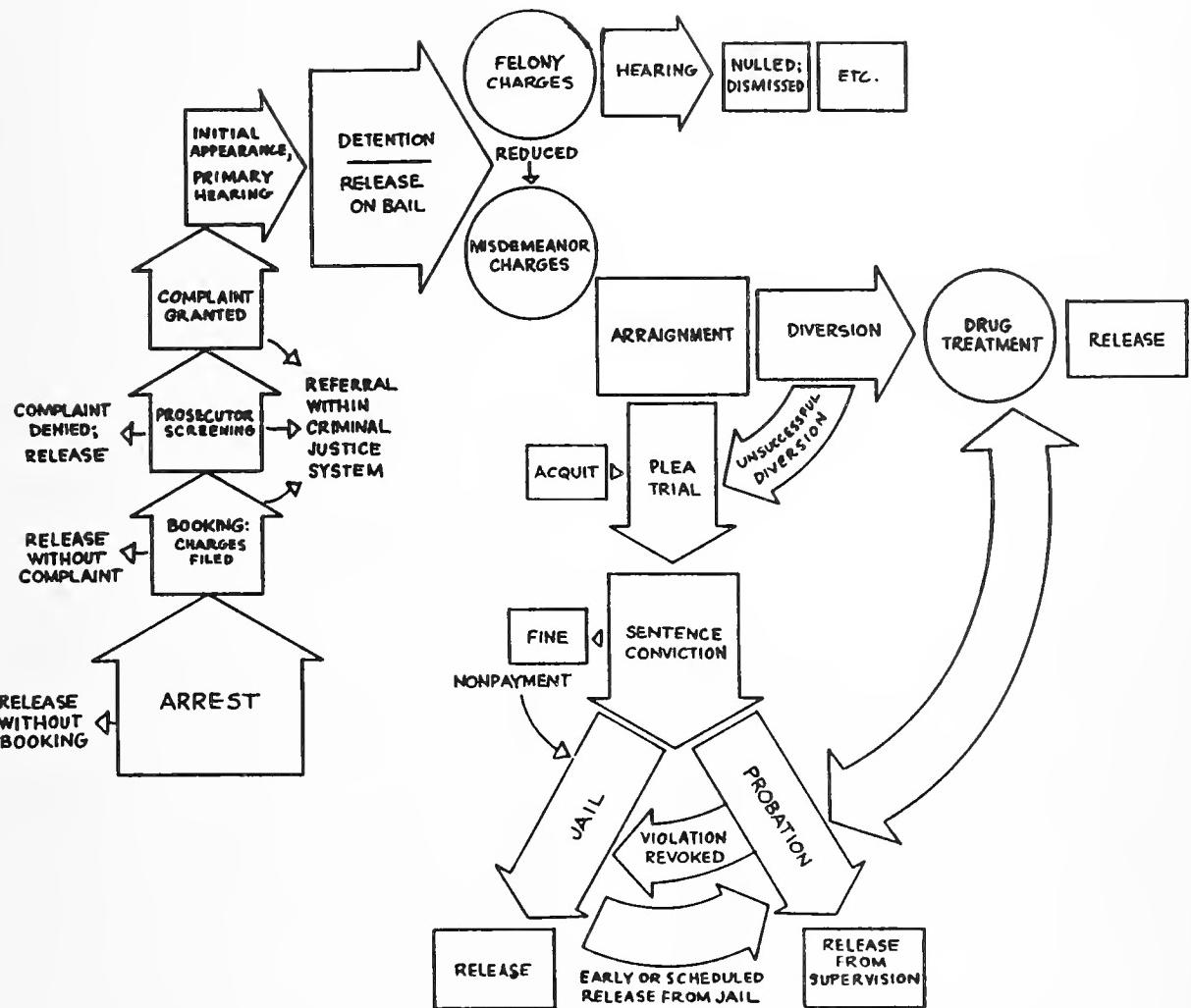


FIGURE 1: Adult arrest dispositions.

release. The period during which further criminal proceedings against the defendant may be diverted is no less than six months and no longer than two years. Progress reports are filed by the probation department with the court no less than every six months.

Although the box marked "Diversion" in Figure 1 is the official point at which it is noted by the court, activity toward this disposition begins soon after the arrest is made. The defense or prosecuting attorney may request continuances from the court to forestall the date of arraignment to allow time for the probation department to conduct its investigation. If the court does not deem that the defendant would benefit by diversion, however, or if the defendant does not agree to participate, the proceedings continue as in any other case. Trial may be by court or by jury; both have the power to dismiss, acquit, or convict. A conviction results in another hearing to deliver the sentence, which may include but is not limited to (1) a jail term; (2) a jail term and a fine; (3) a jail term, a fine, and probation; (4) a fine only; (5) probation only because of a suspended jail term; or (6) a jail term and probation.

Terms of incarceration may be served at the main detention facility, at a minimum security facility, or at a work furlough station. It is possible to be sentenced to a jail term without probation and to apply for it while in confinement. Terms of probation may include drug treatment. Both diversion and probation are pathways out of the criminal justice system into the drug treatment system and are considered in detail in the next section.

### **Diversion and Probation: Pathways to Treatment**

This section focuses on pathways to treatment through the criminal justice system and the implied transfer of criminal justice functions to other social institutions such as drug treatment programs. Although they may be described as "systems," there are few clearly delineated policies that govern the overlap of criminal justice and drug treatment activities and how clients are "shared."

Each system must be thought of as being its own fiefdom within the county, and each operates accordingly. Each has its own mandated mission, budget, hierarchy, and governing philosophy, which has relevance both internally and as it views its place in the total county system.

Diverted criminal justice "clients" and those on probation have increasingly found themselves enrolled in drug treatment facilities, outpatient programs in the community, or some alternative program (such as Narcotics Anonymous meetings or group therapy) in lieu of incarceration. The types of offenders involved in such programs may range from those arrested for possession of small amounts of controlled substances to those charged with offenses in which drugs are not officially specified as part of the offense. The latter type of offender is considered to have a problem with drugs that is specifically linked to his or her crime (e.g., shoplifting, reckless driving, wife-battering, burglary).

Both informal and formal mechanisms allow for these alternative dispositions. Informally, private attorneys or public defenders may contact treatment centers to arrange for a possible placement prior to sentencing, thereby supporting to the court their argument for a lighter sentence. Probation officers may refer someone to a treatment agency, and a shorter probationary period may result. Sheriffs working in the jail, along with the substance abuse mental health worker, may evaluate whether those inmates already convicted are suitable for early release into a treatment program as part of probation in lieu of continued incarceration.

Operationally, probation cases and diversion cases are handled by the same officers through the same department and are subject to similar conditions. Diversion is a process of extrication from the criminal justice system; in that sense, probation is a form of diversion because it entails a less restrictive disposition than straight jail time. The main difference is that diversion occurs before sentencing and probation occurs afterward. Therefore, successful completion of the former means the record of arrest may be expunged.

Probation is a sentence arising from a conviction that may come after or in lieu of jail. If it is violated, the person may be rejailed immediately as well as arraigned on the charge that precipitated the violation, which is carried over (see Figure 1 for a graphic view of this process).

Probation departments and public defender offices provide positions for resource officers who are assigned to locate alternative placements for divertees and convicted misdemeanor offenders whose problems are viewed as drug related. Pretrial drug diversion programs consist mainly of supervising an arrestee's participation in a treatment program. People who have spent time in jail are sometimes released directly into a residential program in the community, with resource officers again providing the coordination.

These long-standing, informal approaches to sentencing have been supplemented in California by structured arrangements in the criminal justice system. The California Penal Code provision permits a civil procedure for the diversion of certain arrestees prior to sentencing, with local jurisdictions deciding whether and how to implement such activities (see Appendix A for the text of Penal Code section 1000). Such programs suspend prosecutorial action and eventually result in the dropping of charges if an appropriate program is completed to the court's satisfaction.

The Penal Code contains provisions that specifically prohibit the applicability of drug diversion to (1) defendants who have had prior convictions for any offense involving controlled substances; (2) defendants whose offense involved a crime of violence or threatened violence; and (3) defendants who have violated parole or probation in the past. Moreover, diversion can be employed for only a limited number of the Penal Code violations that involve controlled substances.

Table 1 shows reported numbers of arrests by charge for drug law violators in the county during 1986, 1987, and 1988. It also provides the same information in percentages. Felony-level arrests for drug law violations account for a larger percentage of total arrests for all felony charges

each year, with charges for dangerous drugs and narcotics showing the greatest increase. Misdemeanor-level arrests for all drug law violations account for only slightly more of the total misdemeanor arrests over the three years; despite the percentage of those arrested for "all other drugs" nearly doubling between 1986 and 1988. Both felony- and misdemeanor- level arrests for marijuana decreased, whereas the number of women arrested for all felony- and misdemeanor-level drug law violations increased. Felony-level arrests for drug law violations accounted for an average of 27.6 percent of all felonies over the three years; misdemeanor- level arrests for drug law violations accounted for an average of 9.3 percent of all misdemeanor arrests during that time.

In the study county for 1986, 842 people were officially diverted; in 1988, 1,786 people were officially diverted, but it is not known how many of these were diverted specifically for drug law violations. Diversion is now an option for a variety of charged offenses, including writing checks with insufficient funds, domestic violence, child abuse, and child sexual abuse, and for offenses committed by mentally retarded people. Data that differentiate among the cases are not easily accessible.

People diverted under all diversion laws, including those charged with drug law violations, become the responsibility of the probation department. Officers use the pre-sentence report and an interview with the person to determine what sort of program is appropriate. A variety of programs are accepted by the probation department as sufficient for the conditions of release under this law, including nondrug treatment programs. Sometimes the person returns to his or her home in another jurisdiction and participates in a program outside the county while keeping in touch with the probation department. Outpatient individual or group therapy is also acceptable but is rarely used because of the cost involved. Regular participation--daily, weekly, or less often--in Narcotics Anonymous or another appropriate 12-step Anonymous group is also a standard disposition.

The majority of drug diversion clients, however, participate in the probation department's own diversion class, which is held for three hours at a time during six consecutive weeks. The curriculum of the class is didactic. A probation officer who teaches the course said some time is spent on issues surrounding illicit drug use and dependence, but the bulk of the time is spent on the legal ramifications of continued use: "We want to make sure they have the information about what to expect if they get arrested again, so they can't say they didn't know any better two times in a row. Even drug offenders are aware of accountability; they already have a degree of responsibility because they qualified for the program and have shown up for the class. We try to emphasize that they will have to take full responsibility for their actions if they continue using and get caught again."

The official procedures and actions of drug diversion programs are not always the same as the programs' unofficial procedures and functions. In practice, the official provisions of the law are not always followed to the letter. Several probation department workers spoke of diverted cases that were more serious than section 1000 of the Penal Code allows. The language of the statute is imprecise (see section 1000.2); to leave terms like "eligibility" and "suitability" undefined and unqualified gives discretionary power to the courts, the district attorney and public defenders, and the probation department.

Diversion may also be viewed as a set of rigidly stipulated concessions on the part of the court in the interest of justice. Cases involving first-time offenders on drug-related misdemeanor charges are often seen in the court; in these cases, diversionary proceedings were enacted to redirect the system's efforts to treatment rather than punishment. Sometimes, too, the chance for a conviction is unlikely owing to shaky evidence or improper arrest procedures. At other times the court may wish to retain some control without continuing the adjudication process by identifying the defendant for diversion and carefully outlining the conditions surrounding release under this provision.

Diversion allows the case to be transferred out of overcrowded courts and jails to the probation department and preferably to the treatment system. The defendant is given an opportunity to escape incarceration and erase a mark in his or her criminal record. The defense attorney can "get the client off" while working to make treatment available. Both private attorneys and public defenders are likely to strategically raise the defendant's drug problem during the adjudication process. Their aim is to have the charges dropped (suspended) in the interest of justice, to have their client diverted instead of prosecuted, or at least to obtain a lighter sentence. Some sources called drug diversion a "tidy compromise mechanism" and a "deal struck in everyone's best interest." Nevertheless, a senior attorney from the public defender's office raised some grave doubts that he and other members of the staff had about the process of diversion into treatment. His reservations have come to outweigh his belief in the viability of the process, especially for the offender. He had several reasons for this, which he used to explain his office's reticence to support diversion for drug law violators.

His first concern is with the selection criteria used to establish eligibility. Beyond statutory considerations, the report compiled by the probation department is, in his eyes, neither thorough nor fair (see Division of Probation, Administrative Office of the United States Courts [1978]; McPike [1978]; Weissman [1979]; and the Bureau of Justice Assistance [1988] for discussions of the pre-sentence report that echo the views of the public defender from a broader perspective). The pre-sentence report is used by the court to decide the fate of the accused, and it always becomes part of the person's permanent record. It contains explicit discussions of the individual's licit and illicit drug (and alcohol) use. The descriptions of usage patterns, along with the conclusions based on them, are made by someone who has had only brief contact with the accused and who has had little if any formal training in diagnosing the severity of drug involvement or dependence. Understandably, many of the comments made to establish the nature of the accused's drug use are directly related to criminal justice considerations

(like prior arrest history) and do not make use of more objective medical or behavioral criteria. Discerning dependence, making the diagnosis, and then matching the client with a punishment or a treatment, or both, is difficult even for someone with clinical training and more time in which to examine the client and explore treatment options.

A related concern involves the judgment made in the pre-sentence investigative report regarding what constitutes a support system. This factor is most often second only to criminal record in deciding whether a person will go to jail or to treatment. The county's public defender talked about this issue at some length. He said he felt the probation officer's judgments about who and what would help the person recover, if treatment were to be provided, were arbitrary and speculative. What is generally recognized by the probation department and by the court as legitimate support in the community is both class and culturally bound. It becomes a real challenge for the public defender to legitimize the support systems of clients of lower socioeconomic status and racial minority clients. Yet many of the clients provided with public defender assistance are from ethnic subcultures that contain disproportionate numbers of individuals living below the poverty line.

Pre-sentence reports are often arbitrary yet predictable documents (Division of Probation, Administrative Office of the United States Courts, 1978; Feeley, 1983). Being middle class, from a traditional intact family, and having some education and employment positively influences the pre-sentence report. Such people are more likely to be considered a good candidate for diversion. Someone with neither a stable family nor prospects for productive employment is at a substantial disadvantage. Chances for alternative sentencing are significantly reduced from the outset.

The public defender also noted that the current treatment system cannot begin to provide all the elements necessary for behavioral change. Literacy skills, job training, employment, and a residential arrangement that allows for long-term sheltered living along with drug treatment are simply not provided. Yet without such bolsters to

enhance an individual's support during treatment, the likelihood of sustained recovery is reduced. In his opinion the result is that minorities are less likely to be placed in treatment settings and are instead incarcerated, whereas whites are more likely to receive treatment in addition to or instead of incarceration.

Most compelling was this public defender's view that to struggle for diversionary dispositions for his clients was to "set them up for failure." In this county, diversion either means loose supervision by a severely understaffed probation department or participation in a rigorous drug-free residential program whose high attrition rate speaks to its difficulty. Very few clients sent to either a therapeutic community or to the probation department succeed--so few, in fact, that the public defender, in a personal interview, stated that he feels he can serve them better by convincing them to spend a little time in jail instead:

The success rate is low . . . when the judge sees the person return with another string of offenses he is predisposed to behave more harshly. Someone who has violated the trust that the court has placed on them by mandating treatment in lieu of incarceration, who then commits more crime, is likely to be prosecuted and sentenced with a vengeance. These guys are viewed as being not only criminals--and recidivists at that--what's worse is that they are treatment failures who carelessly used up their one chance for a free bite of the apple along with the indulgence of the court.

The public defender feels his clients are better served when he bargains with the judge for a reduced sentence instead of diversion to community supervision. Then he spends considerable time trying to convince his client to accept probation and 120 days in jail rather than probation and 30 days in treatment. His views are reflected in the conduct of his fellow public defenders as well who join him in trying to avoid placing clients in the treatment system where their chances for success are small.

There are so many failures because any treatment only works when the person is ready for it and wants to change. Our office [the public defender's] tries less than it used to for alternative dispositions; there are too many probation violators who we just see again and there is less of a need than there was in the seventies, say, to assuage

our own guilt and try to get people into treatment when it's only going to make matters worse.

Regardless of the type of class or program in which a drug-diverted person participates, he or she must stay in regular contact with the probation officer. Several individuals in the probation department verified that drug diversion cases receive the minimum amount of supervision. Probation officers classify their cases according to the amount of danger they pose to the community, and set the level of supervision accordingly. Drug diversion clients are thought to present the lowest amount or minimum risk to the community. As a result, regular contact becomes once a month or less often and may not involve a visit or a phone call. Often the client is only required to send a postcard (known as a "mailer") to the probation officer once a month.

Drug divertees are not sent to any special probation officer who exclusively handles drug law violators; they are included in a regular caseload of people on parole and probation. There are 70 deputies who each oversee an average of 185 cases per month; at present the county has an active adult probation caseload of more than 13,000. The probation officer is mandated by the court to submit progress reports on every person no less than once every six months, but everyone in the criminal justice system considers these documents to be meaningless. Unless the person is rearrested or does something else that is extreme enough to require an office visit or increased surveillance, the officer retains little knowledge of the client's behavior.

### Probation

Probation technically means that the imposition or execution of a sentence is suspended and an order issued for conditional and revocable release in the community under the supervision of the probation department. More than 30 pages of the Penal Code are devoted to the laws governing probation; space prohibits their inclusion or a detailed discussion of them here. Briefly, probation may not be applied to certain cases involving specific violations of the State Code unless it is shown that "justice will better be served" through granting

probation; it must be requested by the defendant or applied for by the inmate and is subject to the approval of the court during a formal hearing for which a report and recommendation are filed by the probation department; probation is revocable if the conditions stipulated by the court are violated; it involves different levels of supervision in the community and may include a mandate to undergo drug treatment; and the level of supervision and type of treatment are set by the resource officer who is assigned to the case.

If a defendant is convicted and the sentence involves probation without a jail term, the defendant is ordered to contact the probation office. The case is reviewed by a probation officer who acts as a case manager. The client's history is assessed, and a plan is developed that allows for retributive payment and/or finding a treatment program that will accept the client and provide appropriate services. If the treatment site is not residential, the client is less easily supervised, and the conditions of the probation are more difficult to enforce.

As deputies, probation officers have the power to rearrest people at any time on the charge of violation of probation. Recently, however, the department lost its main form of detection and enforcement, the power to subject people to urinary screens. Some officers feel that it is difficult to monitor a person's behavior under minimum supervision without such a surprise tactic. Others are less preoccupied with the detection of drug use and more concerned with how to prove in a court that the terms of diversion or probation have been violated if they decide to turn someone in.

The ritual of contacts that establishes rapport between the offender and the probation officer often allows violations to escape detection or, if they are detected, to be overlooked. The relationship may resemble one between a caseworker and a client, or it may be closer to what happens between a police officer and a suspect. It depends on the two personalities, the attitude and level of commitment of the client, the current and past offense record, and the progress

made along the way. A supervisor at the probation department said that increasing caseloads almost prohibit a true therapeutic relationship from developing; the probation officer is most often seen as "the man, the one who can lock you up."

Probation is viewed by probation officers as a period of proving. The court designs the conditions of the release and sets up the legal relationship between itself and the offender. The offender must then prove worthy of the trust of the court. The tether that the probation officer maintains on his client can be pulled and tightened, or modified and reduced. Good behavior is measured in part by the willingness of the client to honor the terms of the probation: to keep appointments, to gather signatures to prove attendance at Narcotics Anonymous meetings, to remember to call in on schedule.

In exceptional cases, a person is turned back to the court for gross misconduct: probation may be violated or diversion revoked and proceedings restarted toward conviction (see Figure 1). The department had no data on how often violation occurs generally across all cases, much less how often it occurs for drug-involved offenders. One contact spoke of the increasing frequency with which desperate crack-cocaine users are pleading with their probation officers to "violate" them and send them back to jail because they cannot stop using even while participating in outpatient treatment. To move people in that condition to protective custody is considered a viable treatment intervention by probation department supervisors and some users.

Several probation officers reported that they were not encouraged in this county to violate their charges unless circumstances were so extreme and clear that incarceration was justifiable to the supervisor, who must then make the case to the jailer. The main detention facility fluctuates between being 200 and 300 percent overoccupied; the county's unofficial policy is to disregard many probation violations that do not directly threaten the safety of the community. It is commonly believed in the department that enough of the people who are on probation and persist in illicit

activities are apprehended by the police apart from any action by the probation officer.

The jail is so overcrowded that compulsive use of crack-cocaine leading to a plea for intense and restricted supervision is not always a good enough reason to reincarcerate an individual. The supervisor stated that unless other crimes were being committed where the person was caught and arrested (besides or in addition to the use of crack), jail was not an option. He said that the amount of paperwork needed and the time lost to process the violation and get the person booked into jail were not worth the trouble unless other crimes could make the case more compelling.

It should be noted that the above was not reported in a way that implied the probation officers were shirking their responsibilities. Throughout the interviews with probation department personnel, several factors were mentioned repeatedly: the heavy caseloads of the officers; the crowded conditions of the jail; the fact that, in the county lock-up, people are serving only 30 percent of their sentences; and the lack of effective treatment for crack and little available treatment for other drug-involved offenders.

Despite the heavy caseloads of the officers and the lack of adequate treatment slots, some clients who are referred by the criminal justice system do get to treatment. Special probation workers known as resource officers are responsible for this function, along with the placement of all other types of offenders. State and local laws also allow probationers to be placed in facilities outside the jurisdiction of the court. The department had no data available on the number of cases referred to treatment out of the state or out of the county, or the percentage of the total number of clients sent to treatment anywhere that these referrals constitute. (See Stitzer and McCaul [1987] for a discussion of criminal justice interventions and the use of different treatment modalities for their clients.)

Resource officers feel constricted by the drug abuse treatment system and speak of a lack of services for all county residents in general and for

most of their clients in particular. There is an acute shortage of the intensely supervised modalities that are more appropriate for some criminal justice system clients. The probation department's resource officers also feel they are in direct competition with the sheriff's office for bed space in residential settings, the preferred type of treatment for criminal justice system clients. Moreover, the current emphasis in the county is to favor paying clients and to favor clients who are judged to be motivated to recover. In this county a mandate to drug treatment from the criminal justice system lacks effectiveness because the treatment system has its pick of clients and criminal justice system clients appear to be close to the bottom of the barrel. In addition, resource officers do not want to alienate the service providers by pushing too hard. They seemed to understand that a balance had been struck that allowed them to refer a certain unspecified number of clients but that they could not expect to enjoy unlimited placement of their clients, given the current condition of the treatment system.

Another resource officer described the dilemma facing the criminal justice system in a slightly different way. He said that if clients can be placed on probation for drug law violations and drug-related charges (and thus are not considered a serious threat to the community), the level of supervision they receive is minimal--once per month or less. This schedule does not allow the probation officer to offer enough support or supervision to the offender, especially if the offender's treatment has ended or if it consists solely of attendance at 12-step groups. This officer said that trying to stay off drugs and out of trouble is difficult even when someone is actively engaged in treatment; it is even harder when the offender returns to the community without a regular, enforced schedule of contacts with the probation department. It was clear that this probation officer was equally as interested in offering his clients an opportunity to "check in with someone," out of genuine concern for them, as he was in monitoring their behavior from a purely disciplinary posture.

In substituting treatment for criminal justice action, the police, prosecutor, court, and corrections system are using a legal basis to mitigate increasing fiscal problems by reducing both court calendars and overcrowding in incarcerative facilities. The rationale to replace traditional with alternative dispositions is therapeutic, but the system's severe resource limitations on delivering services defeat the value of this process to both offenders and the community. It is difficult to know when a decision of diversion or probation handed down "in the interest of justice" is really meant to reduce jail overcrowding, to release impacted courts, or, almost incidentally, to benefit the person by prudently matching the client with the most appropriate available treatment modality (Mosher, 1983).

Occasionally a probation officer is able to place one of his clients in a drug treatment program and arrange for the county to pay for the service. Evidence is mixed in this county that the criminal justice-drug treatment nexus is expanding; it appears that the shortage of drug treatment system services is condensing the flow of clients from the criminal justice system. Yet the number of those who are arrested on drug law violations or are otherwise drug involved--and who might benefit from drug treatment services--continues to increase. The judicial system, whether driven by pragmatic concerns with caseload or by humane considerations to provide treatment, has allowed alternatives to adjudication and incarceration to become formal mechanisms. It appears that most offenders are considered for diversion or, once convicted, for early release and probation simply because of the limits of the detention facility.

In fact, the number of drug cases flowing into the courts has sparked an innovative program on the part of the county clerk administrator. This office oversees the caseload of all the county-level courts, assuring that each legal procedure involving every defendant and every case proceeds in a timely manner consistent with the law. A pilot program that has been in operation for a year directs a large portion of its "petty theft with

priors" and misdemeanor drug cases to an early disposition track or calendar. The program compiles the defendant's prior arrest record, open and closed conviction and probation records, and all pending charges into a file that is reviewed by the district attorney, the defense attorney, and the judge. The defendant is offered a sentence that can be refused; a refusal returns the defendant and the case to normal court proceedings.

A representative from that office said that "the defendant is offered a sweeter deal at that stage; everyone is interested in compromise in the name of reducing the burden of cases in the court." The participants in this pilot program are all multiple-case defendants; combining pending cases and disposing of them in one court procedure accelerates the adjudication process. Although presumably some of the cases have involved sentences that included probation and potentially referrals to treatment, no data were available. This program is further evidence that the judicial system is going to great lengths to find ways of relieving court calendars. It is another place that linkages could occur between the criminal justice and drug treatment systems.

Diversion, probation, and early disposition all involve cooperation and coordination among representatives from both systems. Unfortunately, the resources available to probation officers and treatment providers are not commensurate with the increased demands placed on them by the criminal justice system and by police arrest activities. Even so, the percentage of publicly funded residential treatment clients who are referred by the criminal justice system has risen from 10 percent five years ago to approximately 25 percent today (anecdotal estimate derived from an interview with a criminal justice system supervisor). Data are not available that indicate the source of referral for clients of all publicly funded drug treatment programs.

Moreover, it is possible that the choice of participation in drug services represents more than simply a desire--on the part of the client or on the part of the system--to get into treatment. If a defendant can argue that his or her crime was in some sense "caused" by drugs, then the

appropriate action under the prevailing disease concept of addiction is treatment rather than criminal punishment. Speiglman and Weisner (1982:9) stated this clearly when they argued that "[b]arriers between the drug treatment and criminal justice structures give way under the weight of reasonable treatment needs, pressures to retain elements of social control while lightening correctional caseloads, defense team maneuvers, and efforts by local officials and treatment agencies to strengthen their economies by recruiting new clients or transferring costs."

The ensuing entanglement of drug treatment and criminal justice systems is thus partially clarified by a consideration of court-related concerns. The criminal justice system is faced with the problems of having its population increasingly identified as drug related, both in the courtroom and in its incarceration facilities. At the same time a tendency is visible on the part of the criminal justice system to allow drug-involved "clients" to escape back into the community by seeking treatment as a part of their official justice system disposition through diversion and probation programs. In part this tendency is due to tremendous court overload and a willingness to consider treatment in lieu of punishment. But even at the sentencing stage, probation decisions are crucial. Mosher (1983:23) calls the mechanisms of diversion and probation an "escape valve in a system that actually incarcerates a very small proportion of all criminal offenders."

### The Drug Abuse Treatment System and Inmates

A recent study (commissioned by the county's drug advisory board) stated that, of people incarcerated in the main county detention facility during three months in the spring of 1987, 48 percent were charged with a drug or alcohol offense or admitted that they had a problem with drugs or alcohol (or both). Among the total number of inmates incarcerated at that time, 20 percent were charged with a drug law violation. Of those who did not admit to drug use, 38 percent were arrested on a drug charge. Nearly 75 percent of the inmates who were known by the

staff to have a drug problem were male; half were between 18 and 29 years of age, and about 42 percent were in the 30- to 39-year-old age group.

Black males constituted the largest racial group in jail; they were incarcerated at six times the rate of black females. Blacks are overrepresented in county arrest data, and a disproportionate number of blacks (39 percent) are incarcerated and report drug use. Tables 2a and 2b show arrest data for drug law violators by ethnicity for 1986, 1987, and 1988 in the case study county. Although the rate of felony-level arrests for narcotics among Hispanics decreased over these three years, the rates for both blacks and whites increased. By 1989, blacks who were arrested and charged with narcotics law violations accounted for more than 62 percent of all those arrested for drug law violations whereas for whites, narcotics charges accounted for only 15 percent of all drug law violations. Although the rate of whites arrested for all felony-level drug violations decreased (over the same three years) to about 44 percent by 1989, the rate of blacks arrested for all felony-level drug violations increased in the same time and by 1988 accounted for 48 percent of all felony-level drug law violations. (Blacks account for only 10 percent of the county's total population while whites make up 85 percent.)

The county drug administrator and other officials consider these figures on drug-involved arrestees to be quite low, in part because other offenders are often drug involved but charged with other violations. Without a specific study of arrestees, it is not possible to know how many are involved with drugs and how many are or are not specifically being identified as drug violators. Some of those interviewed in the county systems estimate that up to 90 percent of all inmates had drug and alcohol problems that were related to their offense.

A jail brochure states that the main detention facility's substance abuse assessment and referral program is "designed to identify and to work with the few substance abusing inmates who have the best chance of success in treatment and rehabilitation." There is one program administrator

who oversees all mental health programs including drug and alcohol abuse, and one substance abuse outreach worker for more than 980 inmates. Only a portion of the people who might have a legitimate drug problem and be interested in undergoing an evaluation can be assessed for possible treatment.

The only form of drug treatment per se in jail is the weekly volunteer-facilitated Narcotics Anonymous meetings for any inmate who wishes to attend. There are beds designated for inmates with mental health (including substance abuse) problems; these are filled with people who have been diagnosed as schizophrenic or who suffer from extreme cases of combined mental health and substance abuse problems (termed "dual diagnosis"). The supervisor of the Mental Health and Substance Abuse Program in the detention facility estimated that more than 80 percent of the identified and actively open cases that receive mental health services also suffer from drug problems. The program in the jail is understaffed, employing six clinicians (only one of whom was a designated substance abuse worker) whose primary responsibility is to perform intake mental health screenings on every person booked at the facility (more than 1,700 per month).

Inmates may not refer themselves for assessment by the substance abuse mental health worker. The caseworker spends the majority of his or her time complying with requests from the court, the defense attorneys, and the sheriff's department to evaluate inmates for early release. The inmate's perceived danger to the community, history of drug and crime involvement, and potential for successful completion of a treatment program are the main variables addressed in caseworker reports. If inmates manage to have an informal contact with the caseworker, they are advised to apply for probation or to ask their attorney or public defender to make a formal request for referral to the substance abuse office. This approach is the only guarantee that their drug problem and case will be assessed, albeit none too soon. Once incarcerated, probation is the only pathway to treatment.

The caseworker cooperates with probation officers, attorneys, judges, and treatment providers to place prescreened inmates from the jail directly into acceptable substance abuse treatment programs. Although the "best" placements are thought to be direct transfers from the structure of incarceration to the structure of long-term residential treatment facilities, there are very few of these types of slots available to inmates. According to the caseworker, this is partially because there are not enough slots to meet the demand in the community at large and in part because of the preference on the part of providers not to take convicts as clients.

Sources revealed a discrepancy between the goals of detention facility staff and the goals of treatment providers. The former work to reduce overcrowding in the jail by getting as many people out into the community for treatment as possible without seriously endangering the public. Treatment providers prefer to admit only those people as clients whose case histories and circumstances match the type of setting they can locate.

There is a special sheriff's parole office inside the main detention facility whose staff look for inmates to propose as candidates for early release. This approach also involves deputy sheriff supervision of treatment but through a special office. One official claims that their guiding principle, to reduce jail crowding, may not reflect the inmate's best interest. The office sometimes utilizes resources for treatment in the community that may not be up to the standards followed by the probation department but that meet the general criteria--and get the person out of jail. According to a senior probation department worker, the clients referred to treatment by the sheriff's parole office have "the worst record of failure anywhere in the system." Some people understand this to mean that the officers do not always act as judiciously as they might; however, there is only anecdotal information on this point and no official data evaluating treatment outcomes of the sheriff's paroled clients versus other criminal justice system- and nonjustice system-referred offenders.

Inmates may receive medical supervision for a primary medical condition that drugs have caused or recent withdrawal has exacerbated, but there is no medical staff assigned to provide drug abuse treatment services inside the jail. Those people who go into opioid withdrawal after admission into jail are offered methadone as part of a detoxification program administered through the medical services division of the main detention facility. Inmates who are concurrently enrolled in a community methadone detox or maintenance program when they become detainees are given complimentary doses while incarcerated without having to wait until withdrawal begins. The jail's medical staff obtain the individual's dosing schedule (frequency, amount, and rate of dose reduction) and medical case history from the community methadone program staff. The detention facility will then dose the individual for the remainder of their detox schedule (up to 21 days) and may administer maintenance-level doses for up to 60 days pending case disposition.

If a woman is jailed and found to be pregnant and opioid dependent during the mandatory medical examination, a decision is made by the medical staff as to whether to begin a schedule of methadone maintenance doses. The criteria for this action are the trimester of pregnancy and the level of danger detoxification would pose to her fetus. The final decision is made by the medical staff rather than the woman.

Perhaps the most prominent program concerned with substance abuse in the county detention facility is not a treatment program but an education program originally begun to deal with repeat-offender drunk drivers. It was quickly expanded to accommodate all kinds of poly-substance abusers and is run solely out of the minimum security facility, which is set apart from the main detention facility. Funded by the state Department of Education, the project is a voluntary, in-custody, residential education program for which participants obtain school credit. As with any other education program, inmates can apply their time in the program toward reduction of the term of their sentence. In addition, the program offers other privileges:

inmates enjoy less crowded and newer barracks, better televisions, pass privileges, and the opportunity for family counseling sessions.

Inmates may apply for the program with or without a referral from their attorney. Interested inmates complete an application form, thereby alerting case managers to work with the sheriff's classification officers to determine at what point in the adjudication process the inmate may be admitted. More often, inmates begin the drug education program after they have already been placed at the main facility, having heard about it from other inmates rather than through a judicial or jail officer. Offenders on methadone are not eligible because medical services are available only at the main facility and the education program is only offered at one medium- and one low-level security facility. Drug-involved offenders who committed serious crimes may not be housed in such facilities and thus cannot participate. When and if accepted, inmates are transferred from the main facility to take part in the program while serving their sentence in less restricted surroundings.

There is a feeling among jail staff that participation in the drug education program is commonly used by inmates who need to bolster their case for early release or probation by demonstrating good intentions and the right attitude. Nevertheless, it is a popular program and has received broad support for bringing information about drugs and alcohol to the incarcerated. The project quadrupled in size in 1988 to accommodate 120 inmates out of a total of approximately 1,000 in the minimum security facility. It must be borne in mind, however, that it is strictly an education program and *not drug treatment*. Part of the program involves education about substance abuse, but the bulk of the curriculum consists of cooperative learning activities aimed at increasing detainees' postrelease employability. The program is funded with state Department of Education dollars, and its content is not required to reflect the goals of drug treatment.

There are intrinsic differences in the philosophies of drug treatment and educational programs:

rehabilitative treatment usually means theoretically based programs stressing a continuum of care that includes detailed aftercare plans once a person is released, concepts that education does not embrace. Treatment involves staff who are more highly trained than educators, small-group interaction, and individual therapy conducted by credentialed professionals. Educational classes may provide information, but it is not at all clear that information alone produces--much less sustains--lasting behavioral changes.

Educational programs of this sort are based on learning by repetition, which is thought by some to be not only superficial but either too easy or too hard a way to demonstrate competence: "You go to a class, you take a test, you get your pass for the weekend." As one of the criminal justice system contacts puts it, "It's an easy game to fake and to play, unless you can't read to begin with, and then it's just as unfair as everything else."

The jail's education program provides no coordinated services for reentry or links to community treatment resources because the project has no formal connection with the drug treatment system. In addition, no case management may be done to help prevent inmates from reoffending for drug-related or nondrug-related reasons. The project was originally conceived and sponsored through the cooperative efforts of the sheriff's office, the state and county offices of education, and the county health/mental health/substance abuse program staff. It was originally designed in part to reduce jail overcrowding. Inmates who successfully completed the program were to be prime candidates for early release into residential treatment facilities.

Now, because of an ill-defined rift between the state Department of Education and the local detention facility Substance Abuse Program officials, the two no longer cooperate to coordinate service delivery on the outside with program participation on the inside. The friction has something to do with program funding: the former's budgetary allotment is based on "average daily attendance" and comes directly from the state Department of Education; the latter's is meager by

comparison and comes from criminal justice system monies. Thus, the jail's substance abuse division must compete with other more detention- and control-oriented agendas for its survival in a system that is already vastly overspending. The result has been fragmentation and the loss of an opportunity to administer a comprehensive, uninterrupted program of education plus treatment that may be continued once the offender is back in the community.

### Case Study Conclusions

This preliminary examination of the interplay between one county's criminal justice and drug treatment systems reveals that there are opportunities at several stages in the adjudication process for transfer out of the former and into the latter. Attempts to secure presentencing diversion may be made at any point after an offender is "booked," but they are officially recorded in the court's files following arraignment. Diversion out of the criminal justice system is based on special provisions in the Penal Code for drug-involved offenders. The defendant maintains the right to choose to reject the diversionary proceedings in favor of adjudication for the offense. The terms of the diversion are mandated by the court and include treatment and supervision by the probation department. Divertees who fail to conform to the conditions of their release may be rearraigned for the original offense as well as for any additional offense.

If diversion is not possible and the person is convicted, the defense attorney may argue for a light sentence, often requesting probation in lieu of jail or a shorter jail term with probation following release. The terms of the sentence are set by the court, based in part on recommendations from the prosecuting attorney; reports from the probation department evaluating the person's perceived threat to the community and disposition toward treatment, if applicable; and the offender's prior arrest and conviction history. Often the person serves a partial sentence in jail, applies for probation, and, if probation is granted, is released early into the community to be supervised by the probation department. Again, these decisions are

made by the court with recommendations from jail staff, both sheriffs and substance abuse workers, with an accompanying report from the probation department. The probation department may make a recommendation that early release be denied based on an evaluation of the person's suitability for community-based treatment. Probationary procedures are also regulated by provisions in the Penal Code.

Few attempts have been made at a county level to study the process that governs transfers between the criminal justice and drug treatment systems and clarifies their relationship as social institutions. The law is distinct in its stipulations concerning diversion and probation proceedings and about the roles of the key players in these activities. It seems less clear that the original intent of such laws, that is, to grant drug-involved offenders a chance to be "treated" rather than penalized for their actions, is what currently drives the process of transfer.

Both diversion and probation provide opportunities to reduce court and jail overcrowding without severing the ties of supervision. Mandated treatment in the community overseen by a probation officer is a lesser form of social control than incarceration. It is less expensive and, in the study county, more uneven. Yet the integrity and viability of these dispositions as "justice being served" is threatened because of the increasingly large number of adults who qualify for them, in combination with one or more of the following:

- (1) mismatches between what the law stipulates and what often occurs, resulting from operational pressures on an overcrowded system and prejudicial decision making that may involve class and racial cleavages;
- (2) the ambiguity that characterizes the seques between the criminal justice and drug treatment systems and the means by which people become involved in one system after initial referral to the other, both of which hinder the system's capacity for planning or evaluation activities;

- (3) aggregate mismatches between what the criminal justice system is intended to manage and what the treatment system is designed to process, which requires close coordination, case-by-case matching, and mechanisms for evaluation;
- (4) the absence of an authentic drug treatment program for inmates that is appropriate for a large population diversified by race, gender, age, literacy skills, education, family background, and patterns of drug and alcohol use;
- (5) the dearth of suitable programs in the community that can accommodate the treatment and rehabilitation needs of an undeniably large group of drug users living in the county--those who have interacted with the criminal justice system--who have committed different kinds of offenses and have different types of drug problems, as well as the shortage of treatment programs sensitive to the gender and cultural backgrounds of drug-involved offenders;
- (6) the lack of coordination between jail and community so as to offer a continuum of services and supervision;
- (7) the lack of administrative support for coordination and follow-through between criminal justice supervision and treatment agencies, which is especially subject to breakdown when caseloads are high on either or both sides and the climate is competitive because of funding shortages;
- (8) the low level of supervision given to their cases by probation officers; and
- (9) the overall lack of secure funding in either the criminal justice or the drug treatment systems for mutually supported programs or program components that have as an explicit goal a comprehensive model of working together with an offender, sharing resources and contacts both in the

jail and in the community while respecting each other's domain.

A relatively small number of criminally involved drug abusers in this county are actually mandated from the criminal justice system, and to the treatment system, and such low diversion rates suggest that diversion to treatment does not realize its full potential as an alternative strategy. This underuse is tied to the scarcity of treatment resources; an interview with the director of the detention facility mental health and substance abuse services revealed that there have been no new beds for inpatient care added in the county for 10 years. The resource officers in the probation department can neither place their clients in suitable programs nor provide the level of supervision necessary to monitor their clients effectively. Until additional treatment services are funded, the potential opportunity to positively affect the lives of criminally involved drug abusers by referrals out of the criminal justice system and into drug treatment will remain lost.

Continued and informed debate on these issues is necessary, especially now that diversionary programs and legal mandates to treatment are commonplace. This report is an overview, and quite possibly it poses more questions than it answers. More study is needed to ascertain the nature and number of offenders who follow a pathway from arrest to drug treatment. How many divertees were arrested because of their involvement with a controlled substance or paraphernalia versus the number arrested for an offense that was "caused" by drugs, for example, larceny? What are the outcomes when they receive treatment? Do these differ according to type or level of offense, type of treatment, level of supervision by the probation department, ability of the defendant to escape recapture, or the sociodemographic characteristics of the individual? How does the court measure outcomes? Is its notion of success commensurate with that of drug treatment program providers? Is the jail-based education program making a dent in recidivism among drug-involved offenders? Can it be accepted as "treatment"? Is its popularity and

growing budget justified by this or other evaluative outcome measures?

Perhaps it is the sheer frequency with which the court sees drug-using offenders and drug-related offenses in its case calendars that contributes to the appeal of both alternatives to incarceration and sentence reduction clauses--which often rest on shared caveats of offender participation in drug treatment, education, and rehabilitation. Not everyone can be sent to jail or even be made to serve a full sentence when the county detention facilities operate at twice or three times their intended capacity. It is not possible at this time to determine the size or long-term effect of newly adopted procedures and programs endorsed by the courts other than to note that they seem to facilitate caseload, mediate the numbers of offenders sent to jail, and shorten the length of their stays once they have been incarcerated.

The caseloads of each court differ in size, with unequal proportions of "clients" from each jurisdiction participating in diversion and probation programs that involve some sort of drug treatment. Research is needed to determine whether the variability in sentencing practices among courts is accounted for by the severity of the offense, the potential for rearrest, past arrest and conviction records, or evidence of social support or stability demonstrated by employment or family affiliation. What drives the decision, and how? Is it the appropriateness for referral to an available mode of treatment? Is it the ability of the defense attorney to bring the case to the attention of the system? Do the climates of the court, the district attorney's and public defender's offices, and the probation department influence more than just the terms of the release? Without research specifically designed to follow criminal justice system clients as they are processed by the courts and become involved in drug treatment programs, these questions remain unanswerable.

Several main implications of this report deserve further study. Growing numbers of people who get arrested end up being supervised in the community because their "crime" is transformed into "drug addiction" or "drug abuse" by the

court. This trend has implications with regard to whether the criminal justice or drug treatment system pays for the services they receive. Which agency's budget contains allowances for cases that overlap? It is known that most of the people who end up in jail and who are on probation do not have health insurance to cover treatment schedules mandated by the court. Whose responsibility is it to cover these costs, and what mechanism is in place to evaluate the outcomes of the clients who are covered? Are there people choosing not to apply for diversion or probation because they cannot pay for the treatment they may be mandated to undergo?

Moreover, should the type of care offered to drug-abusing criminals be different from the care other people receive? Will the terms of the treatment necessarily reflect that it is mandated, and does this render the client "involuntary" or "nonvoluntary?" The clientele arriving from the criminal justice system may have patterns of use that are more likely to be defined by chronicity and criminality; should there be specially designed treatment programs for these clients?

Participation in 12-step model recovery programs seems to be part of nearly every treatment center's care plan in this county. Yet two of the guiding philosophies of such programs are that individuals join them voluntarily and that they are able to remain anonymous as members. What does this mean for court-ordered meeting affiliates? How do they understand the concepts presented by the 12-step model under these circumstances? What effect does the presence of involuntary referrals and the seemingly contradictory position of the "Anonymous" groups themselves in relation to the legal system have on those people who do attend meetings out of a sincere desire to find help? The usefulness of participation in 12-step activities may be jeopardized when these basic elements of the program philosophy are compromised or distorted. (See Phillips [1988] for a discussion of legal mandates and attendance at Alcoholics Anonymous meetings.)

The study county has no resources to systematically assess, refer, supervise, and secure

drug treatment services for all those criminal justice system clients who may need them. The apparent lack of coordination between the jail-based drug program officials and resource officers in the community, the minimal supervision offered by probation officers for drug cases, and the shortage of publicly supported drug treatment slots point to a system that is severely underfinanced, overburdened, and incapable of coordinating the services that are available. Diversion or probation programs do not seem to qualify as uniform or legitimate efforts to deliver drug treatment services. From what the literature reveals about the nature of drug use and addiction, the activities of the study county to reduce or eliminate it seem somewhat unfocused and unrealistic.

Finally, as the "War on Drugs" continues, more people are being arrested and processed through the criminal justice system on drug law violations and drug-related charges. Can either the criminal justice or the publicly supported drug treatment systems remain effective without massive increases in their resources? If the criminal justice system continues to increase the number of referrals to drug treatment facilities in the community and the resources of those facilities are not increased accordingly, will this not erode and dilute the entire publicly supported system for drug treatment? Should less time and money be spent on programs to reduce court caseload and facility overcrowding in favor of developing strategies that allow new and varied models of drug treatment programs to be established and utilized?

Currently, the discourse at both local and national levels infers that the use of civil and criminal sanctions to buttress judicial mandates to drug treatment is an idea that has been put into practice because its efficacy has been conclusively demonstrated. Measures of success--reduced use of drugs or abstinence and lack of rearrest--are strongly associated with length of stay in residence, which in turn is positively associated with the level of sanctions in place to encourage the client to remain in treatment (Anglin, 1988; Leukefeld and Tims, 1988). But these discussions and their data also reveal serious shortcomings in

current knowledge about the practice of dictating compulsory treatment; they might be better used as a departure for future inquiry (Brown et al., 1987; Stitzer and McCaul, 1987).

Many of the arguments in support of mandating treatment are constructed on a heroin model of drug use. Heroin is very different from crack-cocaine and appeals to an equally different type of user. The presence of crack-cocaine users and addicts in the criminal justice system quite possibly causes the greatest strain both to it and to treatment providers. To date, there have been very few reports of large-scale, experimentally designed studies that provide information about the costs of a compulsory treatment response, both for state and county budgets, and its effect on local courts, jails, and public treatment systems--but with specific attention to the ramifications of crack use as the behavior to be eliminated. Current policies, practices, and debates all suffer most acutely from a lack of basic information and understanding that could offer a foundation for sound policies, which are difficult to formulate in the absence of systematic study.

Both additional information and a broader, more informed perspective would result from more comprehensive and evaluative study of the county's drug treatment and criminal justice systems. This report contains data drawn from a series of interviews with key players and targeted clients in both systems: representatives from law enforcement agencies, court officials, detention facility workers (both sworn and civilian personnel) probation and resource officers, people receiving drug treatment services because of diversion and probation programs, and some of the counselors, administrators and other staff that provide them. As a case study it could be greatly enhanced by the collection of statistical data using a rigorous research design to ensure validity and reliability. The initial observations regarding the county that presented here were generated mainly through qualitative methods, which could be tested--refined, disproven, elaborated, or discarded. Any further understanding of the complexities of the drug treatment and criminal justice systems as they share clients and problems,

if not philosophies, would be useful. The value of dedicating time and resources to these issues lies in the resultant ability to base decisions about legal mandates to treatment on facts about what happens to whom as an individual encounters and moves through both systems.

The use of systematic inquiry to consider both milieus, especially to sharpen the picture of how they interact, would yield valuable details about what "works" and for whom, what is affordable, and what is feasible, politically and legally. Information of this nature benefits the clients or consumers of services while allowing costs and other outlays of time and resources to be anticipated and monitored. Differentiating among drug-involved offenders makes sense for purposes of determining the best possible calculus of response--as mediated by the two systems--to interrupt individual drug use patterns. The response that is then negotiated and carried out by the treatment and criminal justice systems might prove to be more effective, than one that is less informed and could result in safer communities that require less effort devoted to protection.

## DISCUSSION AND SUMMARY

A brief review of this history and the case study analysis raises a number of unresolved issues. Establishing the boundary between punishing drug law offenses and treating drug use disorders is difficult. Disagreement and confusion about how and where to make the distinction are reflected in both the literature and in the practices described in the case study. The ambiguous connection among the courts, the jails, and the drug treatment system; the critical shortage of drug treatment services; and the unevaluated quality of the care provided in the study county only exacerbate these dilemmas. Indeed, the connections among the courts, jails, and drug treatment system and among their personnel in the study county appear to be not only ambiguous but ungrounded and inconsistent; fiscal, legal, medical, and philosophical issues are further obscured.

Some concerns might be mitigated if greater care were taken to differentiate between and among addicts and users. Proceeding as if all users were addicts and all addicts led irregular, nonproductive criminal lives seems problematic (Velmen and Haddox, 1989). The reality is a spectrum that ranges from the criminal addict who may genuinely be a menace to society and not a strong candidate for rehabilitation, through all kinds of permutations to the "controlled," socially responsible user whose only crime is the use of a prohibited substance (Krivanek, 1988). Both extremes raise particular sets of problems, especially for two institutionalized systems that struggle to remain flexible and offer appropriate programs and solutions to drug-using offenders and nonoffenders whose drug use, dependence, and addiction patterns are so varied.

Other considerations come to mind as well. There is a confusion of roles among both health care providers and criminal justice personnel in terms of primary loyalty to the patient versus loyalty to the public. There is also the potential for co-optation of treatment providers by criminal justice agendas. Therapeutic elements of treatment are in danger of being overwhelmed by the number of referrals as well as superseded by the punitive aspects of criminal justice concerns (President's Commission on Mental Health, 1978; Feeley, 1983; DeLeon, 1988). Criminal justice personnel in the study county have almost the opposite concern: in their view, treatment milieus are not restrictive enough in their supervision of criminal offenders and may somehow undermine the primary mission of the criminal justice system, which is to protect the community. The roles assumed by both sets of personnel (with the client-offender, with their own institutions and professions, and with other cooperative systems) can become confused, and this confusion can affect the quality and effectiveness of each of these relationships as well as the outcome of the offender. Treatment provided under health care auspices is distinctive in both philosophy and practice from criminal justice requirements and goals.

Deciding whether an individual is eligible for treatment is a sorting function undertaken within the constraints of the two systems and the community on two different client dimensions: criminal record and suitability for treatment. The decision involves status determinations on these two dimensions, neither of which may be made by the district attorney or the clinician acting alone. Both are presumably guided by the language of the statutes that emanate from legislation. It is a language that is often stretched or constrained, depending on the particulars of a given case, by professionals who are called on to make judgments and weigh evidence that may be well outside the range of their expertise and training.

Problems arise when clinicians retain the ability to turn down clients from the criminal justice system, whether because of unsuitability or insufficient funding. Judicial intervention in the treatment process raises other issues. The passing of laws that dictate the type and quantity of treatment or that require or forbid certain methods preempt the clinician's discretion to select treatment according to his or her own judgments. When the extent of the caseload threatens the uniform execution of the laws, as is occurring in the study county, the actual or latent value to the defendant of alternatives to incarceration is sacrificed. Any discretion left to the resource officers or to the clinician to make referrals is further eroded when services are insufficient in terms of availability or in terms of availability plus appropriateness to the client.

Discretion and authority can be shared without sacrificing the individual concerns of the personnel in each system or the drug-involved offender. Presumably, having more options or slots available would improve overall service delivery by lessening the competition within and among the systems for placements. An increased number of slots is advisable even if the drug treatment system cannot or should not be expanded to accommodate everyone in the criminal justice system and the community who wants treatment. Matching the systems' resources with client characteristics and needs becomes more plausible, making a wider range of services available as options increase with

added client slots. Additionally, the criminal justice system could establish and maintain its own range of drug treatment services for offenders, services that reflect the special status of the clients as both drug users and criminal offenders. These services could include treatment during incarceration and aftercare in the community following release.

The current obsession in the literature with compulsory treatment and civil commitment reflects the language and mind-set of the times: the nation is in the midst of a war on drugs. Wars justify the use of force and the subjugation of individual concerns to the good of the community and the maintenance of order. There are also treatment issues relating to coercion: whether legal controls on the patient are good or bad for therapy. Coercing a person to enter treatment as an alternative to more traditional criminal penalties seems attractive. Compared with imprisonment, it is both economical and cost-effective--not so much because existing treatment is enormously successful and inexpensive but because the usual process of criminal law is singularly costly and often ineffective (Krivanek, 1988).

The dilemmas become especially acute when treatment fails to rehabilitate the criminal justice-entangled client. The therapeutic rationale is withdrawn as punitive sanctions are reapplied. The current policy seems to imply that sickness ends when compliance ends or failure in treatment occurs. The evaporation of concepts of illness according to this model is neither therapeutic nor just. Failure to become or remain drug free is too often characterized as the exclusive fault of the individual rather than as an indication that there may be shortcomings within the treatment system that deserve attention as well. Should an individual's criminal status (and the criminal solution) so easily override what had been considered at least in part a medical condition--especially one from which it is difficult to recover (Gusfield, 1967; Wexler, 1973; Brown et al., 1987)?

It has been argued that the medicalization of a social problem such as drug use is a more guileful

form of social control than pure imprisonment (Becker, 1963; Pitts, 1968; Kittrie, 1971; Glaser, 1974; Conrad and Schneider, 1980; Mäkelä, 1980; Alper and Nichols, 1981; Feeley, 1983; Morgan, 1983; Harrington, 1985; Krivanek, 1988). This shift was begun in part out of a decision that drug addiction was a disease of sorts that could be more effectively managed by the medical profession. Yet the client who is characterized as suffering from the disease is expected to assume some measure of responsibility in order to allow recovery to occur. Decisions are made about a person's fate based on "medical" evidence as to what treatment would facilitate a cure. Doing straight time in prison among other regular offenders is very different from being placed in a drug treatment program and monitored by the court, a probation officer, and treatment staff. Drug treatment regimens generally are not considered to be easy to follow--either when a sincere attempt is made to recover or if one only wants to "do the time" in order to stay out of jail or to get out sooner than would otherwise be possible.

The various roles assumed by the government and the actions performed in its name by a range of service provision systems seem also to be conflicted. A constitutional and philosophical responsibility to safeguard a citizen's civil rights and fundamental liberties is considerably challenged by the endorsement or use of direct or indirect coercion to motivate that same individual to enter treatment. Proper measures to assure the safety of the community must be undertaken at the same time. Over the years these issues have not lost their ability to incite controversy, and few to date have found resolution.

Treatment was never meant to be offered or forced upon every drug user who came into contact with the criminal justice system. It was viewed as an expensive but cost-effective way to handle certain people who both the treatment and criminal justice systems felt would benefit from it. Extraction from the adjudication process, whether pretrial or postconviction, is meant to be cumbersome, and perhaps this contributes in part to the ill-defined process that governs diversion to treatment.

Clinical evidence reported to date does not conclusively support blanket referrals to compulsory treatment (Toborg, 1981; De Leon, 1988; Leukefeld and Tims, 1988; Maddux, 1988). The efficacy of compulsory treatment is related to the quality of the available programs as well as their implementation, client differences, client motivations, and the multivariate complexity of the recovery process itself (Brown et al., 1987; Stitzer and McCaul, 1987; De Leon, 1988). Evidence of the relative success or failure of treatment or of the retention of clients in treatment without legal coercion is not definitive. Evaluative outcome studies refer largely to heroin-using populations of the past and not to the cocaine and crack-cocaine-using populations of the present. These data do not justify compulsory treatment participation without reference to the fundamental shortages in resources where services are offered.

Drug treatment has not been given high priority for funding since the mid-1970s. Now that the drug issue has regained political prominence and the specter of human immunodeficiency virus infection looms large, interest in treatment has been sparked. Yet known methods of treatment and their efficacy--especially for users of crack-cocaine--may still be regarded as uncertain and varying in quality (Brown et al., 1987; Stitzer and McCaul, 1987; Nurco et al., 1988). If treatment is advisable for a criminal justice-involved drug user, its best use is as a disposition regulated by a judicial proceeding that is separate from the legal determination of guilt or innocence. To date, neither diversion nor probation proceedings function in this way. The mandate to treatment as a sentence for drug-involved offenders is neither orthodox treatment nor a traditional punitive sanction. Further efforts to clarify the distinction between the two, while at the same time improving treatment modalities that accommodate this type of client, are needed.

The criminal justice system has long been used for providing services, however inadequate, for those who cannot afford them. Thus, the problem of reducing the scope of criminal and legal justice is complicated by the critical need for concurrent development of nonjudicial health care service

delivery systems in the interest of social justice (Klapmuts, 1974). Currently, alternatives to incarceration seem to be conceived of--or at least function best as--escape valves of the criminal justice system rather than as carefully planned therapeutic interventions. Perhaps gains made in treatment program availability and effectiveness will soon match the reductions in courtroom caseload that have already been realized.

The causes of drug abuse are complex, but they may be explored and faced directly. The analogy between drug addiction and contagious disease is often made. Within that context, even when a readily defined illness exists and even when that illness can be effectively treated with appropriate measures, the elimination of the problem from a community typically requires broad measures that extend beyond supervision, quarantine, and imprisonment at the level of the individual.

The rate of tuberculosis was reduced by medicine and treatment regimens but only finally controlled when living conditions were substantially improved. The disease remains strong in areas where such improvement has not occurred despite the fact that individual patients are readily identified and treated. Similarly, drug use, abuse, and addiction are, to some extent, a social problem. They will never be eliminated by measures levied solely at individuals that are not also designed to consider and address broader social issues (Newman, 1973).

Good public health practice dictates that the target of interventions should include the ecology of drug use and drug users. The complex social, political, and economic issues underlying drug use, especially on the part of those who are criminally involved and incarcerated, require more substantial responses than treatment alone. Although treatment can help some people some of the time and should be available, concepts of medicalization, disease, and pathology at the level of individual cannot override the need for structural changes. The social and environmental causes of--and solutions to--criminally involved

illicit drug use must be emphasized in addition to constructing a public order response. The report of the White House Conference for a Drug Free America (1988:71) correctly identifies treatment as "simply the clinical event which initiates the ongoing and more complex cultural process of recovery." In viewing the drug problem as both a socially and criminally generated problem, the public health response appears to be more comprehensive. It extends the focus to education, jobs, and other quality of life issues involved in the continued use of drugs. Thus, the treatment episode may be complemented rather than undermined by placing it in a broader context that highlights additional opportunities for improvement.

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#### FOOTNOTE

<sup>1</sup>The reports cited in this section are not included in the reference list in order to protect the identity of the case study county.

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## REFERENCES AND BIBLIOGRAPHY

- Agopian, M.W. (1977) Evaluation of adult diversion programs: the California experience. *Federal Probation* 41(3):15-18.
- Allison, M., and R.L. Hubbard (1985) Drug abuse treatment process: a review of the literature. *International Journal of Addictions* 20:1321-1345.
- Alper, B.S., and L.T. Nichols (1981) *Beyond the Courtroom*. Lexington, Mass.: Lexington Books, D.C. Heath and Company.
- Ancel, M. (1971) *Suspended Sentence*. New York: Humanities Press.
- Anglin, D., ed. (1988) A social policy analysis of compulsory treatment for opiate dependence. *Journal of Drug Issues* 18(4):503-704.
- Becker, H. (1963) *The Outsiders*. New York: The Free Press.
- Bonnie, R.J., and M.R. Sonnereich (1973) Proposed uniform drug dependence treatment and rehabilitation act and commentary. Pp. 826-856 in Second National Commission on Marihuana and Drug Abuse, *Drug Use in America: Problem in Perspective. Treatment and Rehabilitation*, Vol. 4. Washington, D.C.: U.S. Government Printing Office.
- Brecher, E.M. (1972) *Licit and Illicit Drugs*. Boston: Little, Brown and Co.
- Brown, B., G. Buhringer, C. Kaplan, and J. Platt (1987) German/American report on the effective use of pressure in the treatment of drug addiction. *Psychology of Addictive Behaviors* 1(1):38-54.
- Brüün, K. (1971) Finland: the non-medical approach. Pp. 545-558 in L.G. Kiloh and D.S. Bell, eds., *Society, Culture and Drinking Patterns*. New York: John Wiley.
- Bureau of Justice Assistance (1988) *Treatment Alternatives to Street Crime: TASC Programs*. Washington, D.C.: U.S. Department of Justice.
- Bureau of Justice Statistics (1983) *Prisoners and Drugs*. Washington, D.C.: U.S. Department of Justice.
- Carter, R.M. (1972) The diversion of offenders. *Federal Probation* 36(4):31-36.
- Chaiken, M.R., and B.D. Johnson (1988) *Characteristics of Different Types of Drug-Involved Offenders*. Issues and Practices series. Washington, D.C.: National Institute of Justice.
- Chambers, C., J. Inciardi, D. Peterson, H. Siegal, and O.Z. White, eds., (1987) *Chemical Dependencies: Patterns, Costs and Consequences*. Athens, Ohio: Ohio University Press.
- Chute, C.L., and M. Bell (1956) *Crime, Courts and Probation*. New York: The MacMillan Company.
- Conrad, P., and J. Schneider (1980) *Deviance and Medicalization: From Badness to Sickness*. Toronto: The C.V. Mosby Company.
- Courtwright, D. (1982) *Dark Paradise: Opiate Addiction in America Before 1940*. Cambridge, Mass.: Harvard University Press.

- Danaceau, P. (1973) *Methadone Maintenance: The Experience of Four Programs.* Washington, D.C.: The Drug Abuse Council, Inc.
- De Leon, G. (1988) Legal pressure in therapeutic communities. Pp. 160-177 in C. Leukefeld and F. Tims, eds., *Compulsory Treatment of Drug Abuse: Research and Clinical Practice.* NIDA Research Monograph No. 86. Rockville, Md.: National Institute on Drug Abuse.
- Division of Probation, Administrative Office of the United States Courts (1978) *The Pre-sentence Investigation Report.* Pub. No. 105. Washington, D.C.
- DuPont, R., A. Goldstein, and J. O'Donnell, eds. (1979) *Handbook on Drug Abuse.* Washington, D.C.: National Institute on Drug Abuse.
- Duster, T. (1970) *The Legislation of Morality: Law, Drugs and Moral Judgment.* New York: The Free Press.
- Feeley, M.M. (1983) *Court Reform on Trial: Why Simple Solutions Fail.* New York: Basic Books.
- Flanagan, T.J., and K.M. Jamieson, eds. (1988) *Sourcebook of Criminal Justice Statistics--1987.* Bureau of Justice Statistics, NCJ-111612. Washington, D.C.: U.S. Department of Justice.
- Fort, J. (1968) Social problems of drug use and drug policies. *California Law Review* 56(1):17-28.
- Fox, R. (1978) *So Far Disordered In Mind.* Berkeley, Calif.: University of California Press.
- Gandossy, R.P., J.R. Williams, J. Cohen et al. (1980) *Drugs and Crime: A Survey and Analysis of the Literature.* Washington, D.C.: National Institute of Justice.
- Glaser, D. (1974) Interlocking dualities in drug use, drug control, and crime. Pp. 39-56 in J. Inciardi and C. Chambers, eds., *Drugs and the Criminal Justice System.* Beverly Hills, Calif.: Sage Publications.
- Goldfarb, R. (1975) *Jails: The Ultimate Ghetto.* Garden City, N.Y.: Anchor Press/Doubleday.
- Gottlieb, B. (1985) *Public Danger as a Factor in Pretrial Release: A Comparative Analysis of State Laws.* U.S. Department of Justice, National Institute of Justice, research report. Washington, D.C.: U.S. Government Printing Office.
- Gropper, B.A. (1984) *Probing the Link Between Drugs and Crime.* Washington, D.C.: National Institute of Justice.
- Grossman, J. (1974) *Methadone Treatment: Legal Aspects.* Arlington, Va.: National Drug Abuse Training Center.
- Gusfield, J.R. (1967) Moral passage: the symbolic process in public designations of deviance. *Social Problems* 15(2)(Fall):175-188.

- Hall, A., E. Gaynes, D.A. Henry, and W.F. Smith (1984) *Pretrial Release Program Options*. Issues and Practices series. Washington, D.C.: National Institute of Justice.
- Harrington, C.B. (1985) *Shadow Justice: The Ideology and Institutionalization of Alternatives to Court*. Contributions in Political Science No. 133. Westport, Conn.: Greenwood Press.
- Hubbard, R., M. Marsden, J. Rachal, H. Harwood, E. Cavanaugh, and H. Ginzburg (1989) *Drug Abuse Treatment: A National Study of Effectiveness*. Chapel Hill, N.C.: University of North Carolina Press.
- Hudson, J., B. Galaway, W. Henschel, J. Lindgren, and J. Penton (1975) Diversion programming in criminal justice: the case of Minnesota. *Federal Probation* 39(1):11-19.
- Inciardi, J.A. (1981) *The Drugs-Crime Connection*. Beverly Hills, Calif.: Sage Publications.
- Inciardi, J.A. (1987) Crime and alternative patterns of substance abuse. Pp. 485-524 in C. Chambers et al., eds., *Chemical Dependencies: Patterns, Costs and Consequences*. Athens, Ohio: Ohio University Press.
- Inciardi, J.A., and C. Chambers, eds. (1974) *Drugs and the Criminal Justice System*. Beverly Hills, Calif.: Sage Publications.
- Jaffe, J. (1979) The swinging pendulum: the treatment of drug users in America. Pp. 3-16 in R. DuPont et al., eds., *Handbook on Drug Abuse*. Washington, D.C.: National Institute on Drug Abuse.
- Joint Committee of the American Bar Association and the American Medical Association on Narcotic Drugs (1961) *Drug Addiction: Crime or Disease?* Interim and Final Reports of the Joint Committee. Bloomington, Ind.: Indiana University Press.
- Kadish, S.H. (1983) *Encyclopedia of Crime and Justice*, Vol. 3. New York: The Free Press.
- Kaplan, J. (1983) *The Hardest Drug: Heroin and Public Policy*. Chicago: University of Chicago Press.
- King, R. (1974) The American system: legal sanctions to repress drug abuse. Pp. 17-56 in J. Inciardi and C. Chambers, eds., *Drugs and the Criminal Justice System*. Beverly Hills, Calif.: Sage Publications.
- Kittrie, N. (1971) *The Right To Be Different*. Baltimore, Md.: The Johns Hopkins Press.
- Klapmuts, N. (1974) Diversion from the justice system. *Crime and Delinquency Literature* 6:108-131.
- Kleiman, M.A. (1986) The AIDS epidemic and the criminal justice system: developing a policy agenda. Paper in progress, Program in Criminal Justice Policy and Management, John F. Kennedy School of Government, Cambridge, Mass.
- Klein, D. (1983) Ill and against the law: the social and medical control of heroin users. *Journal of Drug Issues* (Winter):31-55.
- Kramer, J.C. (1970) The state versus the addict: uncivil commitment. *Boston University Law Review* 50(1).

- Krivanek, J. (1988) *Heroin: Myths and Reality*. Boston: Allen and Urwin.
- Leukefeld, C., and F. Tims, eds. (1988) *Compulsory Treatment of Drug Abuse: Research and Clinical Practice*. NIDA Research Monograph No. 86. Rockville, Md.: National Institute on Drug Abuse.
- Levine, H.G. (1978) The discovery of addiction. *Journal of Studies on Alcohol* 39:143-174.
- Lidz, C.W., and A.L. Walker (1980) *Heroin, Deviance and Morality*. Sage Library of Social Research, Vol. 112. Beverly Hills, Calif.: Sage Publications.
- Lindesmith, A.R. (1965) *The Addict and The Law*. Bloomington, Ind.: Indiana University Press.
- Maddux, J. (1988) Clinical experience with civil commitment. *Journal of Drug Issues* 18(4):575-594.
- Mäkelä, K. (1980) What can medicine properly take on? Pp. 225-233 in G. Edwards, and M. Grant, eds., *Alcoholism Treatment in Transition*. London: Croom Helm, Alcohol Education Centre and Addiction Research Unit.
- McGlothlin, W., M.D. Anglin, and W. Bruce (1977) *An Evaluation of the California Civil Addict Program*. Rockville, Md.: National Institute on Drug Abuse.
- McPike, T.K. (1978) Criminal diversion in the federal system: a congressional examination. *Federal Probation* 42(4):10-15.
- Mecca, A.M. (1978) A State of the Art Assessment of the Treatment Alternatives to Street Crime Program. Unpublished dissertation, University of California, Berkeley.
- Morgan, P.A. (1983) The political economy of drugs and alcohol: an introduction. *Journal of Drug Issues* 13(1):1-7.
- Mosher, J.F. (1983) Alcohol: both blame and excuse for criminal behavior. Pp. 437-460 in R. Room, and G. Collins, eds., *Alcohol and Disinhibition: Nature and Meaning of the Link*. NIAAA Monograph No. 12. Washington, D.C.: U.S. Government Printing Office.
- Mullen, J. (1975) The Dilemma of Diversion (monograph). Washington, D.C.: U.S. Department of Justice, Law Enforcement Assistance Administration, National Institute of Law Enforcement and Criminal Justice.
- Musto, D. (1973a) *The American Disease*. New Haven, Conn.: Yale University Press.
- Musto, D. (1973b) Evolution of American narcotic controls. Pp. 335-348 in Second National Commission on Marihuana and Drug Abuse, *Drug Use in America: Problem in Perspective. The Legal System and Drug Control*, Vol 3. Washington, D.C.: U.S. Government Printing Office.
- Narcotic and Drug Research, Inc. (1986) *Crime Rates among Drug Abusing Offenders*. New York: Narcotic and Drug Research, Inc.

Narcotic and Drug Research, Inc. (1988) *Comprehensive State Department of Correction Drug Treatment Strategy Proposal*. New York: Narcotic and Drug Research, Inc.

National Institute on Drug Abuse (1978) *Criminal Justice Alternatives for Disposition of Drug Abusing Offender Cases*. Washington, D.C.: U.S. Government Printing Office.

Newman, C.L., and B.R. Price (1976) Jails and drug treatment: a national perspective. *Federal Probation* 40(3):3-12.

Newman, R. (1973) We'll make them an offer they can't refuse. Pp. 94-100 in *Proceedings of the Fifth National Conference on Methadone Treatment*. New York: National Association for the Prevention of Addiction to Narcotics.

Nurco, D.N., T.E. Hanlon, J.W. Shaffer, T.W. Kinlock, N. Duszynski, and P. Stephenson (1988) Differences among treatment clinic types in attitudes toward narcotic addiction. *Journal of Nervous and Mental Disease* 176(12):714-718.

Ohlin, L., ed. (1973) *Prisoners in America*. Englewood Cliffs, N.J.: Prentice-Hall.

Packer, H.L. (1968) *The Limits of the Criminal Sanction*. Stanford, Calif.: Stanford University Press.

Palmer, J.W. (1974) Pre-arrest diversion: victim confrontation. *Federal Probation* 38(3):12-18.

Perlman, H.S. (1974) *Legal Issues in Addict Diversion: A Layman's Guide*. Washington, D.C.: Drug Abuse Council, Inc., and American Bar Association Commission on Correctional Facilities and Services.

Perlman, H.S., and P.A. Jaszi (1975) *Legal Issues in Addict Diversion: A Technical Analysis*. Washington, D.C.: Drug Abuse Council, Inc., and American Bar Association Commission on Correctional Facilities and Services.

Peterson, D.M. (1974) Some reflections on compulsory treatment. Pp. 143-182 in J. Inciardi and C. Chambers, eds., *Drugs and the Criminal Justice System*. Beverly Hills, Calif.: Sage Publications.

Phillips, M.D. (1988) The American criminal justice system and mandates to alcohol treatment: the role of alcoholics anonymous. Paper presented at the First Meeting of the International Collaborative Study of Alcoholics Anonymous, Helsinki, Finland, August.

Pitts, J.R. (1968) Social control: (I) the concept. Pp. 381-396 in D. Sills, ed., *International Encyclopedia of the Social Sciences*, Vol. 14. New York: Macmillan Company and The Free Press.

President's Commission of Law Enforcement and Administration of Justice. (1967) *The Challenge of Crime in a Free Society*. Washington, D.C.: U.S. Government Printing Office.

President's Commission on Mental Health (1978) Report of the liaison task panel on psychoactive drug use/misuse. Pp. 2118-2138 in Vol. 4, Appendix of the *Task Panel Reports Submitted to the President's Commission on Mental Health*. Pub. No. PCMH/P-7827. Washington, D.C.: U.S. Government Printing Office.

- Room, R. (1978) Governing Images of Alcohol and Drug Problems: The Structure, Sources, and Sequels of Conceptualizations of Intractable Problems. Unpublished Ph.D. dissertation, University of California, Berkeley.
- Second National Commission on Marihuana and Drug Abuse (1973a) *Drug Use in America: Problem in Perspective*. Final Report. Washington, D.C.: U.S. Government Printing Office.
- Second National Commission on Marihuana and Drug Abuse (1973b) *Drug Use in America: Problem in Perspective. The Legal System and Drug Control*, Vol 3. Washington, D.C.: U.S. Government Printing Office.
- Second National Commission on Marihuana and Drug Abuse (1973c) *Drug Use in America: Problem in Perspective. Treatment and Rehabilitation*. Vol. 4. Washington, D.C.: U.S. Government Printing Office.
- Selke, W. (1982) Diversion and crime prevention. *Criminology* 209(3-4):395-406.
- Senay, E. (1978) Treatment goals for substance abusers. *American Journal of Drug and Alcohol Abuse* 5(3):299-305.
- Senay, E., V. Shorty, and H. Alksne, eds. (1974) *Developments in the Field of Drug Abuse: National Drug Abuse Conference Papers*. Cambridge, Mass.: Schenkman Publishing Company.
- Sills, D., ed. (1968) *Encyclopedia of the Social Sciences*, Vol. 14. New York: Macmillan Company and The Free Press.
- Sloan, I.J. (1980) *Alcohol and Drug Abuse and the Law*. Dobbs Ferry, N.Y.: Oceana Publications, Inc.
- Smith, R. (1974) Addiction, coercion, and treatment: reflections on the debate. Pp. 852-862 in E. Senay et al., eds., *Developments in the Field of Drug Abuse: National Drug Abuse Conference Papers*. Cambridge, Mass.: Schenkman Publishing Company.
- Speigelman, R., and C. Weisner (1982) Accommodation to coercion: changes in alcoholism treatment paradigms. Working paper prepared for presentation at the Annual Meeting of the Society for the Study of Social Problems, San Francisco, September.
- Staples, W.G., and C.A.B. Warren (1983) Social junk as human commodities: a historical perspective on the privatization and profitization of social control. Paper presented at the Annual Meetings of the Pacific Sociological Association, San Jose.
- Stitzer, M., and M.E. McCaul (1987) Criminal justice interventions with drug and alcohol abusers: the role of compulsory treatment. Pp. 331-362 in E.K. Morris and C.J. Braukman, eds., *Behavioral Approaches to Crime and Delinquency*. New York: Plenum Press.
- Sutherland, E.H., and D.R. Cressey (1974) *Criminology*. Philadelphia/New York/Toronto: J.B. Lippincott Company.
- Terry, C.E., and M. Pellens (1928) *The Opium Problem*. New York: Bureau of Social Hygiene.
- Toborg, M.A. (1981) *Pretrial Release: A National Evaluation of Practices and Outcomes*. National Evaluation Program, Phase II Report. Series B, No. 2. Washington, D.C.: U.S. Department of Justice.

- Toborg, M.A., D.R. Levin, R.H. Milkman, and L.J. Center (1976) *Treatment Alternative to Street Crime*. National Evaluation Program, Phase 1 Report. Series A, No. 3. Washington, D.C.: U.S. Department of Justice.
- Vanagunas, S. (1979) Police diversion of juvenile offenders: an ambiguous state of the art. *Federal Probation* 43(3):48-52.
- Velmen, G.F., and V.G. Haddox (1989) *Drug Abuse and The Law Sourcebook*, Vol. 1. New York: Clark Boardman Company, Ltd.
- Vorenberg, E., and J. Vorenberg (1973) Early diversion from the criminal justice system: practice in search of a theory. Pp. 151-166 in L. Ohlin, ed., *Prisoners in America*. Englewood Cliffs, N.J.: Prentice-Hall.
- Watters, J.K., C. Reinerman, and J. Fagan (1985) Causality, context and contingency: relationships between drug abuse and delinquency. *Contemporary Drug Problems* 12(3):351-374.
- Weissman, J. (1978a) *Drug Abuse, The Law and Treatment Alternatives*. Criminal Justice Studies. Cincinnati, Ohio: Anderson Publishing Company.
- Weissman, J. (1978b) Survey of state drug offender diversion policies. *Contemporary Drug Problems* 7(4):533-556.
- Weissman, J. (1979) Drug offender diversion: philosophy and practices. *Drug Abuse and Alcoholism Review* 2(1):1-8.
- Weissman, J., and B. Berns (1976) Patient confidentiality and the criminal justice system: a critical examination of the new federal confidentiality regulations. *Contemporary Drug Problems* 5(4):531-552.
- Weissman, J., and R. DuPont (1982) *Criminal Justice and Drugs: The Unresolved Connection*. New York/London: Kennikat Press.
- Wexler, D. (1973) Therapeutic justice. Pp. 450-473 in Second National Commission on Marihuana and Drug Abuse, *Drug Use in America: Problem in Perspective. Treatment and Rehabilitation*, Vol. 4. Washington, D.C.: U.S. Government Printing Office.
- Wexler, H.K., and R. Williams (1986) The Stay'n Out therapeutic community: prison treatment for substance abusers. *Journal of Psychoactive Drugs* 18(3):221-230.
- Wexler, H.K., D.S. Lipton, and K. Foster (1985) Outcome evaluation of a prison therapeutic community for substance abuse treatment: preliminary results. Paper presented at the American Society of Criminology Annual Meeting, San Diego, November.
- Wexler, H.K., D.S. Lipton, and B.D. Johnson (1988) *A Criminal Justice System Strategy for Treating Cocaine-Heroin Abusing Offenders in Custody*. National Institute of Justice, Issues and Practices Series. Washington, D.C.: U.S. Department of Justice.
- White House Conference for a Drug Free America (1988) *Final Report*. Washington, D.C.: U.S. Government Printing Office.
- Yale Law Journal* (1974) Note: pretrial diversion from the criminal process. *Yale Law Journal* 83(4)(March):827-854.

**Table 1: Reported Information for Drug Law Violations by Level of Charge and Year in Number and Percentage of Adults Arrested**

Level of Charges	1986		1987		1988	
	No.	%	No.	%	No.	%
<b>Felony-level charges</b>						
Felony arrests for marijuana	248	12.3	174	7.9	213	7.5
Felony arrests for dangerous drugs	596	29.7	688	31.2	813	28.8
Felony arrests for narcotics	1,143	56.9	1,313	59.6	1,761	62.4
Felony arrests for all other drugs	21	1.0	28	1.3	32	1.1
Male felony-level arrests for all drug law violations	1,673	83.3	1,774	80.5	2,270	80.5
Female felony-level arrests for all drug law violations	335	16.7	429	19.5	549	19.5
Total felony-level arrests for all drug law violations	2,008	26.6	2,203	26.8	2,819	29.3
Total felony arrests for all charges	7,557	23.9	8,215	24.7	9,603	28.4
<b>Misdemeanor-level charges</b>						
Misdemeanor arrests for marijuana	365	16.0	374	18.2	369	14.7
Misdemeanor arrests for glue sniffing	7	.003	6	.003	3	.001
Misdemeanor arrests for selling/trafficking	1,561	68.4	1,248	60.6	1,353	54.0
Misdemeanor arrests for all other drugs	349	15.3	430	20.9	778	31.1
Male misdemeanor arrests for all drug law violations	1,995	87.4	1,789	86.9	2,170	86.7
Female misdemeanor arrests for all drug law violations	287	12.6	269	13.1	333	13.3
Total misdemeanor-level arrests for all drug law violations	2,282	9.4	2,058	8.2	2,503	10.4
Total misdemeanor arrests for all charges	24,063	76.1	24,990	75.2	24,154	71.5
<b>Felony- and misdemeanor-level charges</b>						
Total felony and misdemeanor arrests for all drug law violations	3,955	13.5	4,261	12.8	5,322	15.7
Total felony and misdemeanor arrests for all charges	31,620	100.0	33,205	100.0	33,757	100.0

Source: State of California Department of Justice, Sacramento, Calif., 1986, 1987, and 1988.

**Table 2a: Reported Information for Drug Law Violations by Ethnic Group, Level of Charge, and Year in Numbers of Adults Arrested**

Level of Charges	Adult Total		White Total		Hispanic Total			Black Total		Other Total		
	1986	1987	1988	1986	1987	1988	1986	1987	1988	1986	1987	1988
<b>Felony-level drug law violations</b>												
Narcotics	1,143	1,313	1,761	293	383	440	81	86	93	743	826	1,206
Marijuana	248	174	213	98	95	112	7	9	11	137	70	89
Dangerous drugs	596	688	813	512	594	703	37	49	54	37	37	48
Other drugs	21	28	32	15	21	19	0	1	2	6	10	6
Total felony-level drug violation	2,008	2,203	2,819	918	1,092	1,274	125	145	160	923	943	1,353
Total all felonies	7,557	8,215	9,603	3,484	3,801	4,249	555	618	795	3,326	3,611	4,311
<b>Misdemeanor-level drug law violations</b>												
Marijuana	365	374	369	236	268	265	14	26	28	95	75	67
Glue sniffing	7	6	3	2	6	3	4	0	0	1	0	0
Selling/trafficking	1,561	1,248	1,353	1,224	950	899	120	90	101	194	188	318
Other drugs	349	430	778	200	278	552	28	35	61	107	116	189
Total all misdemeanor drug law violations	2,282	2,058	2,503	1,662	1,502	1,719	166	151	190	397	379	574
Total all misdemeanors	24,063	24,990	24,154	15,586	15,777	15,299	2,374	2,614	2,603	5,224	5,938	5,501
Felony + misdemeanor drug law violations	4,290	4,261	5,322	2,580	2,594	2,993	291	296	350	1,320	1,322	1,927
Felony + misdemeanor all charges	31,620	33,205	33,757	19,070	19,578	19,548	2,929	3,232	3,398	8,550	9,549	9,812

Source: California Department of Justice, Sacramento, Calif., 1986, 1987, and 1988.

**Table 2b: Reported Information for Drug Law Violations by Ethnic Group, Level of Charge, and Year in Percentages of Adults Arrested**

Level of Charges	Adult Total		White Total		Hispanic Total		Black Total		Other Total			
	1986	1987	1988	1986	1987	1988	1986	1987	1988	1986	1987	1988
<b>Felony-level drug law violations</b>												
Narcotics	56.9	59.6	62.4	31.9	35.0	34.5	64.8	59.3	58.1	80.5	87.6	89.1
Marijuana	12.3	7.9	7.5	10.7	8.7	8.8	5.6	6.2	6.9	14.8	7.4	6.6
Dangerous drugs	29.7	31.2	28.8	55.8	54.4	55.2	29.6	33.8	33.7	4.0	3.9	3.5
Other drugs	1.0	1.3	1.1	1.6	1.9	1.5	0	.006	1.2	.006	1.1	.004
Felony-level drug law violations as percentage of all felonies	26.6	26.8	29.3	26.3	28.7	30.0	22.5	23.5	20.1	27.8	26.1	31.4
<b>Misdemeanor-level drug law violations</b>												
Marijuana	16.0	18.2	14.7	14.2	17.8	15.4	8.4	17.2	14.7	23.9	19.8	11.7
Glue sniffing	.003	.001	.001	.004	.002	.002	2.4	0	0	.002	0	0
Selling/trafficking	68.4	60.6	54.0	73.6	63.2	52.3	72.3	59.6	53.1	48.8	49.6	55.4
Other drugs	15.3	20.9	31.1	12.0	18.5	32.1	16.9	23.2	32.1	26.9	30.6	32.9
Misdemeanor-level drug law violations as percentage of all misdemeanors	9.4	8.2	10.4	10.7	9.5	11.2	7.0	5.8	7.3	7.6	6.4	10.4
Felony + misdemeanor drug law violations as percentage of all violations	13.5	12.8	15.7	13.5	13.2	15.3	9.9	9.2	10.3	15.4	13.8	19.6

Note: Percentages are row calculations for ethnic groups within each year by level of charge. Percentages may not sum to 100 percent because of rounding.

Source: California Department of Justice, Sacramento, Calif., 1986, 1987, and 1988.

# DRUGS, THE WORKPLACE, AND EMPLOYEE-ORIENTED PROGRAMMING

*Paul M. Roman and Terry C. Blum*

It would probably be difficult to locate any substantial segment of the American public in 1990 who would deny that the nation is facing a major problem with drugs. Beyond such a general statement, consensus within a public sample survey is likely to deteriorate rapidly because defining the "drug problem" is a task riddled with ambiguity. "Drugs" range from caffeine to heroin, and one group's "problem" may describe another group's cherished activities. Beyond these difficult specifications, it is evident that a broad series of actions are under way to "combat" the drug problem, to "prevent" the use or misuse of drugs, and even to produce a "drug-free" America. The level of interest and resource investment is a complex variety of activities that in itself constitutes a phenomenon to be explained. No matter how one defines the "drug problem" and its numerous impacts, it is evident that it is only one of many problems currently faced by American society; yet drug-related issues have moved to a high-priority position both in terms of public opinion and governmental action.

The focus in this paper is on the responses to perceived problems with drug abuse in the workplace. Our task is to describe this major facet of the "drug problem" in American society by examining the nature of responses to it. It is assumed that a focus on the social and organizational responses to an issue not only elucidates the form and effectiveness of those responses but also provides a crucial context in which to consider the definition of the problem.

The sections that follow are first, an overview of major issues, followed by an examination of the sociohistorical pattern of employer response to drug abuse during the past 20 years. Next is a somewhat parallel, albeit abbreviated,

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consideration of the pattern of employer responses to employee alcohol abuse issues. An effort is then made to pull together these three streams of information into a consideration of the fundamental issues surrounding constructive approaches to drug abuse in the workplace and the factors that facilitate or retard the use of employee assistance programs (EAPs) as part of this overall strategy.

## THE PROBLEM OF DRUGS AND THE WORKPLACE

### Scope of the Problem

An initial question is, what is the scope of the problem? Limiting that question only to illicit drugs, an authoritative source is the federal agency charged with research drug-related issues, the National Institute on Drug Abuse (NIDA).

- A NIDA research funding program announcement, which is intended to attract scientists to studies of the scope and distribution of drug use behaviors among workers and in the workplace, indicates that 65 percent of the 18- to 25-year-old population have experience with illicit drugs, with 44 percent of this population segment reporting these experiences during the past year (NIDA, 1987).
- A report from a national household survey conducted with NIDA support indicates that, in a similar population segment, those aged 18 to 34, 60 percent have used marijuana at least once and approximately 25 percent have used cocaine at least once (Voss, 1988).
- The director of NIDA offers a somewhat different basis for problem definition: a survey in 1985 revealed that 29 percent of employed Americans in the 20-40 age group had used an illicit drug at least once during the year prior

to the survey, whereas 19 percent reported use during the past month (Schuster, 1987).

- The age segment focus of these data is used to observe that younger persons have a substantially higher rate of reported drug experience than older persons, and that such a difference not only describes a major problem with drugs among persons in this age segment who are employees but also projects a workplace drug problem of continuing seriousness as workers who exhibit such behaviors move through their life careers in the work force.
- A survey commissioned by NIDA was recently reported in the *New York Times*, with considerable attention paid to the reports of 79 percent of 224 chief executives of Fortune 1000 corporations, 18 governors, and 23 mayors that substance abuse was a significant or very significant problem in their organization. Evidence of the acute nature of the problem is demonstrated by the finding that only 54 percent of these respondents saw a substance abuse problem of this magnitude four years ago (Freudenheim, 1988). Unfortunately, the reader learns later in this story that the survey generated only a 25 percent response rate, raising the distinct possibility that those for whom the issue was salient may have been overrepresented in the respondent group.

These brief statistics show that there is an association between drug use and employment and offer a foundation for projecting a broad series of problematic impacts associated with drug-using behaviors. But a careful examination of these statistics, both alone and collectively, raises many questions about their implications. Especially troublesome is the attribution of drug use as drug abuse and, in the instance of the corporate survey, the substitution of impressions of an escalating drug problem for epidemiological evidence of actual change. This sampling of data provides some flavor of the difficulty of producing statements with any sort of precision regarding the drug abuse problem in the American workplace.

### Employer Motives to Initiate Action

Beyond research precision is a practical question: Why should the workplace show a concern with employee drug use? Although the answer seems "obvious," it is important to note the variability of reasons for this concern. The complexity of these motivations is linked in turn with the structure of the responses the employer initiates or supports.

Although neither exhaustive nor meant to represent any hierarchy of importance, the list below provides some indication of the range and complexity of employer motives and the assumptions that may underlie such responses.

- Drug use is a threat to safety in the workplace.
- Drug-using behavior is "wrong" and will not be tolerated in the workplace.
- The presence of illicit drug use is in turn an indicator of illicit "drug dealing," possibly introducing criminality into the workplace as well as increasing the likelihood that "pushing" will occur to encourage nonusing employees to become users.
- Drug-using habits are expensive and encourage theft from both the employer and fellow employees.
- Drug use reduces workers' immediate productivity, in terms of both quality and quantity of performance.
- Drug use reduces workers' careers and long-term productivity, and continued use is associated with subtle declines in work quality and quantity.
- Drug use creates unpredictable and disruptive behavior in the workplace.
- Employees' performance and attendance may be affected by drug-using behaviors of their dependents and family members,

indicating that a constructive program of help for both employees and their family members can reduce work performance problems.

- Dealing constructively with employee drug problems is a demonstration of corporate social responsibility.
- The offer of assistance to employees with drug problems is a relatively low-cost but perhaps morale-boosting improvement in employee benefits.
- The presence of efforts to eliminate or control drug abuse in the workplace is a benefit to nondrug-using employees by protecting their safety and reducing uncertainty over the behavior of their co-workers.
- Many employers, including large, well-known companies, have implemented programs to deal with employee drug abuse; therefore, such programs must represent state-of-the-art techniques of human resources management.

### **Drug Screening/Drug Testing and Employee Assistance Programs**

The combination of some set of the above-listed reasons with the perception of drug use in the employee population has led to two basic types of organizational interventions to deal with drug abuse problems among employees: drug screening/drug testing programs (DSPs) and employee assistance programs (EAPs).

There are several different kinds of DSPs, but the most prevalent form is preemployment screening. Some DSPs also test current employees before they are promoted, after they return to work from extended absences, or when they are transferred into jobs regarded as particularly sensitive to the impact of drug abuse. Drug screening "for cause" may be incorporated into a long-standing fitness-for-duty policy. A supervisor with evidence that a subordinate is impaired but without

evidence of the cause of the impairment may ask to have the employee's fitness for work verified by a medical functionary, who in turn may use a drug screen. Related to this type of screening is postaccident screening. Another type is universal screening of all employees, sometimes as part of preannounced medical check-ups. Random screening of all or some preselected segments of the work force is a rarely used type of DSP, although it is the subject of the most controversy.

EAPs are usually based on a written policy statement. They provide access for supervisors to either in-house or out-of-house professional consultation in dealing with subordinates whose performance is affected by any of a range of personal problems, nearly all of which are encompassed by substance abuse, psychiatric, or marital/family problems. EAPs also provide for employee self-referral. The basic functions of EAP services include clinical assessment of employee problems, referral to appropriate community resources, follow-up of the employee at the workplace following service use, training of supervisors and managers about EAP policy, and provision of consultation to supervisors/managers when the occasion arises for their use of the program to deal with subordinates.

An issue of major concern in this paper is the extent to which EAPs constitute a reasonable intervention-solution for dealing with drug abuse in the workplace. This issue is also relevant to DSPs. Although drug screening programs are specifically and exclusively focused on drug abuse in the workplace, they are generally limited in their attention to illegal drugs and may or may not involve screening for prescription drug use; they rarely if ever deal with alcohol use or abuse.

By contrast, EAPs began as industrial alcoholism programs that later broadened their scope to encompass the range of personal and biobehavioral problems that could affect employee job performance. EAPs also serve a broad "self-referral" function in providing a reactive mechanism in the workplace to respond to employee-initiated requests for personal assistance.

Thus, EAPs are geared to deal with drug abuse problems within a panoply of other employee problems, but they depend on either supervisory or employee motivation for program use to occur.

Thus, EAPs' "target population" differs somewhat from that of DSPs. Whereas DSPs seek objective physiological evidence of drug use, independent of behavior, performance, or self-report, the design of EAPs limits their drug-related service usage to instances of impaired job performance, peer- or self-motivated initiation of requests for personal assistance by drug-using employees, or self-motivated initiation of requests for assistance in dealing with a drug-using family member. Nearly all of these modes of identification involve subjective indices or perceptions, in contrast to the presumed objectivity of drug screening.

This difference in target employee populations sets the stage for confusion about the relative utility and importance of the two strategies. It also, however, describes a very crucial point: by their design, neither DSPs or EAPs are equipped to deal with the entire range of drug use and abuse events in a work force or in a workplace. Furthermore, it is not reasonable to conclude that the combined efforts of both programs would accomplish such a comprehensive goal. Both programs have problems in the reliability and validity of their identification strategies. Moreover, neither program has the wherewithal to detect what is probably the most common and perhaps even the most costly drug-related issue in the workplace, the concurrent or recent use of alcohol that creates risks for job performance problems and accidents but that cannot be detected reliably either through performance monitoring or tests of body fluids.

At first blush, these two strategies appear to represent distinctively different philosophies and assumptions regarding the exclusion or inclusion in the workplace of the drug-using or drug-abusing employee. Drug testing appears to be a "tough" strategy of "get rid of 'em" in a context of exclusion and protecting the workplace against their impact; EAPs, on the other hand, appear sympathetic toward employees' personal problems and oriented primarily toward rehabilitation within

a context of inclusion. Although these characterizations are partly accurate, they fall far short of an understanding of the range of uses to which either program strategy can be put; in addition, they do not reflect the potential impact of interaction and cross-referrals between the two strategies.

Another important contextual consideration regarding DSPs and EAPs is that, to date, nearly all of the programs of each type have been voluntarily adopted by employers. At the time of this writing, there is movement toward the implementation of mandatory drug screening in nuclear power installations, in parts of the transportation industry, and in many agencies of the federal government. In many of these instances, regulations are in place that require the establishment of an EAP service for referral usage by employees who are found positive in drug screenings.

Again, as with much of the terminology used in this paper, "drug screening" has different meanings in different contexts and, with the variations in use described above, can refer to distinctively different strategies. The essential point is that drug screening mandated by law or public regulation is only in its infancy, and this is even more distinctively the case with EAPs. The fact that so much workplace-based activity has developed in a context of voluntarism is notable, as well as indicative of the further facts that substantial numbers of workplace decision makers (1) have perceived significant problems in terms of both employee drug and alcohol abuse and (2) have also seen enough merit in DSPs and EAPs to motivate voluntary investments in various levels of implementation.

Therefore, an examination of these interventions does not represent a typical "evaluation" of the consequences of regulations or funding initiatives implemented by government. At the same time, the federal government has played an active role in attempting to facilitate the implementation of both types of programs in the private sector and has played a more proactive role in the development of such programs for federal employees. Thus, it is

also incorrect to view either DSPs or EAPs as primarily the products of "grassroots" social movements, initiated by employees or other activists at the level of the individual workplace.

### **CONTRASTS BETWEEN ATTITUDES TOWARD ALCOHOL AND TOWARD OTHER DRUGS**

To a considerable extent, constructive approaches to dealing with alcohol problems in American society and the American workplace have become normative over the past 20 years (Roman, 1988b). Such a claim cannot be made, however, for reactions to other drug problems. There is a marked ambivalence surrounding the notion that "drug problems can be dealt with just like alcohol problems," or its converse, "alcohol problems are just another form of drug problem," or even "alcohol is a drug." A comprehensive overview of the similarities and differences between and within alcohol and other drug categories is far beyond the scope of this paper. However, one major difference pervades many considerations, and that is the apparent degree of acceptance of the notion that the most reasonable and rational approach to the individual with an alcohol problem is some form of medicalized/treatment-oriented strategy as an alternative to punishment or exclusion.

The acceptance of the disease concept of alcoholism in American culture is far from complete (Blum et al., 1989), but some degree of such acceptance is found in the majority of those queried in nearly all research samples. By contrast, if one uses the mass media and publicity emanating from the federal government as a guide, public acceptance of some form of a disease concept of drug problems is much less than that associated with alcohol. Most media presentations characterize drug abusers in a deviant or criminal category, often without a clear distinction between the drug dealer and the drug user, as if the two categories were completely overlapping. This characterization may be curiously out of step with public opinions, for research has recently shown that more than 80 percent of a public sample in a presumably conservative state (Georgia) favor

medicalized treatment rather than a punitive approach in dealing with persons dependent on cocaine, one of the drugs around which much media emotion is projected (Blum et al., 1989).

Governmental pronouncements on drug abuse in the workplace give a double message. They suggest preemployment drug screening as a way of reducing the drug problem by refusing to accept drug users into the work force while at the same time recommending that employees who are found positive in drug screenings be offered referral and rehabilitative assistance through an EAP (Walsh and Hawks, 1986; Backer, 1987). The combination of these messages might not appear contradictory if a rather complex assumption is accepted: the responsibility for dealing with drug users lies solely with the community except in those instances in which an employed drug user chooses to take advantage of help that may or may not be proffered by an employer. On the other hand, the ground is laid for considerable confusion in the common scenario in which evidence of drug use (which is all that preemployment drug screens reveal) is not only an acceptable basis for refusing employment but a practice actively supported and recommended by the same federal agency that advocates a treatment approach for dealing with a person whose urine sample produces similar results but who is already employed.

These policies support an image of an Alice-in-Wonderland kind of affliction, with the definition of identical phenomena varying with the employment status of the source of the drug-positive urine specimen: those not yet employed are in the deviant or criminal category, whereas those already employed are in the sick or disabled category. There is little doubt of the sincerity of the authors of such recommendations, and careful reading of most documents shows their explicit recognition of the contradictory stance being exhibited. The mischief and confusion may arise as such documents are perused by the busy or harried executive or human resources manager who has little intention or desire to become an expert on substance abuse in the workplace. In a nutshell, it is clear that the national policy toward drugs in the workplace is not clear. However,

culturally based definitions of different behaviors play a large role in determining the acceptability of different responses to drug and alcohol problems, an issue considered in greater detail in the sections that follow.

## DEVELOPMENT OF EMPLOYER RESPONSES TO DRUG USE

### Historical Perspective

Although the past several years have seen a great deal of attention to efforts to create a "drug-free workplace" in the United States, this is at least the "second round" in the battle against employee drug abuse. A brief history of the events related to this issue over the past 20 years may inform an understanding of the viability of current responses to the problem.

As with alcohol, the history of various drugs in American culture reflects differing attitudes and definitions across different periods. Alcohol was extensively used and considered largely nonproblematic in the American colonies and in the early years of the Republic, up until the 1820s when a serious temperance movement emerged (Clark, 1976). Although there are many varieties of drugs, it is important to note that two drugs that later have become of central concern as problems, opiates and cocaine, were widely used (as painkillers in the former case and as over-the-counter medications for a wide variety of ills in both cases) and generally were viewed as of little concern in American culture until the last quarter of the nineteenth century. From this time onward, however, increasingly stringent and intense controls developed and are clearly at one with the ideology of prohibition of distribution and the intense efforts to prevent use of these substances that prevail today.

Commentaries published during the 1800s occasionally noted the presumed linkage between drug use and "stress," offering hypotheses not altogether different from some proposed today but with several contradictory perspectives (Morgan, 1981). On the one hand these nineteenth-century

writers would point to the use of drugs as a means for dealing with the extreme stresses accompanying some professional occupations, especially medicine. Discussions would describe the use of drugs as coping mechanisms and impugn large-scale social change in America as the genesis of such extremely stressful conditions. On the other hand were writers who offered a quasi-disease concept of addiction to drugs, pointing out that, although many people used drugs, only those with "neurological weakness" would become addicted to them. In between these notions is the hypothesis that the "stimulus of liberty" and its attendant demands on the mind were etiological factors in drug addiction (Thwing, 1888, in Morgan, 1974).

Although there is little evidence of drugs in the workplace as an issue of social concern in the United States until the early 1970s, one notable exception is a report of an apparently informal survey of experience with workplace drug addiction (Blair, 1919, in Morgan, 1974), published for diffusion to industrial and occupational physicians. The motivation for this report is unclear, although brief reference is made to considering the effects on the work force of the Harrison Act of 1914. The report itself suggests little if any evidence of significant drug problems in the workplace, although several observations foreshadow issues that assume prominence 70 years later. The report provides several valuable insights into the thinking of the day, with the author writing from a workplace perspective:

- Although addiction to drugs is reportedly rare in 1919, "drug tippling" is "as common among industrial workers . . . as among other employed people." This reference to the perceivedly inconsequential occasional or nonaddictive use of drugs contrasts with the subsequent focus of drug screeners on any use of illicit drugs. Referring later in his essay to the possibility of detecting drug usage through medical examinations, Blair posits that "tipplers" probably would not be detected through such examinations. He then states that "it does not seem to me

necessary for an industrial plant to set out a drag-net for minor disabilities or minor addictions" (p. 75), a position contrasting markedly with the philosophies of some drug screening today.

- A similar contrast with contemporary problem definitions is found in Blair's description of a long-term user of morphine who has not escalated his use over a 14-year period shows no apparent ill effects, and whose highly responsible and respected position offers no support for a notion of adverse job performance impacts of routine opiate use.
- According to Blair, the drug problem is most common among "drifting" and "floating" industrial work forces. Among the specific categories cited are gang workers on docks, transportation workers, bituminous coal miners, and both farming and nonfarming occupational groups in sparsely populated rural areas. Blair sees drug problems as extremely rare among skilled industrial workers and among the "better classes" of workers generally.
- In terms of social control efforts in the workplace, Blair observes that if an industrial worker were to become "one of the degenerate type of addicts," he would be "physically unable to work and would not be tolerated by his fellows if he tried to do so." Blair states that labor unions "rarely tolerate the confirmed drug taker" and that the average industrial worker "despises dope" and would promptly report drug-related incidents. However, "a degree of prophylaxis in an industrial organization is advisable. Morale should be kept up in every way and the idea disseminated that it is not manly to tipple with 'dope.' The 'Treat 'em Rough' idea as regards peddlers of drugs will make this cowardly class keep away from the works" (p. 72).

Blair also includes recommendations that "will go a long way to prevent drug tippling" in the workplace. These include good housing for workers, adequate medical care, good sanitation, minimal night work, "an interest in the men and their families," and, interestingly, "reasonable regulations regarding the use of alcoholic liquors." That the final recommendation appeared on the eve of national prohibition of alcohol distribution is especially curious. It is further noteworthy that Blair's preventive recommendations bear little resemblance to the solutions popular at present.

Notable in this report are a definition of the problem, a distinction between serious and nonserious use, some projections about problem distribution, recognition of the importance of informal social controls in the workplace, suggestions for a "drug-free" work culture, and a program for primary prevention of drug abuse in the workplace.

The next evidence of commentary about workplace drug problems does not appear until the early 1970s. The almost complete submergence of concern about drugs in the workplace over this period tends to support an assumption that drug abuse tended to be concentrated among those in marginal social categories. Other than occasional commentary about drug use and addiction among medical professionals (Winick, 1961; Smith and Blachly, 1966; Simon and Lumry, 1969) and those in the performing arts (Becker, 1953; Winick, 1960), there is no literature in the ensuing period that describes any general pattern of nonalcohol drug problems in the workplace.

Awareness of a national drug problem is best documented by the passage of Public Law 91-513, the Comprehensive Drug Abuse Prevention and Control Act of 1970. It is well known that the cohort entering young adulthood during this period had become extensively interested in and involved with illegal drugs, with marijuana and the hallucinogens gaining the most attention. The drug issue was escalated in the mass media by its association with the "dropped-out" youth from

middle-class and more prosperous backgrounds. The image of "flower children," characterized by illicit drug use coupled with expanded sexual freedom, was reflected in the popular cultures of music, dress, and various public events of high visibility.

These themes were intermingled with a more serious and dramatic set of behaviors, beginning with opposition to the war in Southeast Asia and escalating to various "anti-establishment" perspectives and behaviors within this cohort. Curiously, a parallel disrespect for law and order that emerged during the 1920s contributed to the public decision to repeal national prohibition of the manufacture and distribution of alcohol. In the late 1960s, however, much of the reaction to the association between drug use and social rebellion was centered on increasing social control.

### THE FIRST WAR ON DRUGS IN THE WORKPLACE

Interest and concern about drugs in the workplace arose in concert with the congressional action cited above. Much of the tone of this brief "movement" was centered on the drug abuser as a "menace" who threatened order and profitability in the workplace. Representative of media attention at the time was an article in the May 4, 1970, issue of the *Wall Street Journal* (Malabre, 1970). The article reported that Metropolitan Life Insurance had an alarming increase in the number of employees dismissed for using drugs at work; New York Telephone was using private plain-clothesmen to identify "dope-pushing rings," and the company had recently fired 55 employees because of their involvement with narcotics. In addition, "Wall Street firms" were reported to have a "big problem" with drugs among their younger employees. This article viewed the drug problem as "new" and therefore difficult for companies to understand and combat. It stated that, whereas objective detection for heroin use was possible through urine screening, other drugs could not be detected easily; it suggested that companies should fear widespread law-breaking by their employees and the possibility that employees'

drug use would lead to theft and other dishonesty. Furthermore, the effectiveness of treatment intervention was regarded as very poor. Another article in the *New York Times* (Wilcke, 1970) highlights a theme prominent during this period of concern about workplace drug abuse: that drug problems have moved from the ghetto to the work-place.

For another example, the first author was a speaker at a February 1971 program in New York City sponsored by Advanced Management Research International, Inc. The seminar, designed for corporate executives, was entitled "Narcotics and Drugs in Business: Their Phenomenal Economic Impact, How to Stop the Profit Drain." Much of the program's content focused on theft and the detection of drug rings operating on company premises. Some share of the focus was also on the poor job performance of drug users, the safety hazards they created, and their morale impact on co-workers in terms of creating fear. The strategies presented to deal with the problem were both pre- and postemployment screening; identification by supervisors of the symptoms of drug use; beefing up company security to detect both drug abusers, drug distribution, and drug-related thefts; and corporate education programs designed to create "an employee force that . . . will ultimately form the internal network that forces drugs from your company." This two-day seminar program included nothing about the possibilities of treatment or rehabilitation, although these topics did emerge during discussion at the conference.

In the early 1970s the vast majority of materials in the mass media were emphasizing the threatening nature of the entry of drugs into the workplace. There is little doubt that the employed drug abuser was being situated primarily in a criminological framework. There was, however, early attention to treatment possibilities. This emphasis came from two sources. First, as indicated in a program from a three-day conference on drug abuse in industry in Philadelphia in May 1970, there was a major section of the program devoted to treatment and rehabilitation of the drug abuser. These presentations were made by directors of in-house

corporate alcoholism programs. Second, the Philadelphia conference included a presentation by Leo Perlis, then director of the AFL-CIO Department of Community Services, who emphasized labor's commitment to a treatment approach to deal with the employed drug abuser. This was followed by a *New York Times* article in October 1970 describing the establishment in New York City of referral centers for drug-abusing union members as well as the initiation of a campaign to encourage the negotiators of union contracts to include health insurance coverage for the treatment of drug problems.

Other evidence of the interest in workplace drug abuse during this period was the publication of two books directed toward the workplace (Chambers and Heckman, 1972; Trice and Roman, 1972). The former volume is more in the vein of a "hard-line" approach with an emphasis on detection and screening and considerably less discussion about rehabilitation. The latter volume, co-authored by one of the present authors, was originally drafted with a sole focus on alcohol problems in the workplace. Several of the reviewers of the developing draft urged the inclusion of workplace drug abuse, a suggestion that was followed even though other reviewers urged exclusive attention to alcohol problems. The resulting book was primarily a sociocultural analysis of the work-relevant features of alcohol and other drugs. It was oriented toward emphasizing the gravity of workplace alcohol problems as compared with drug problems, arguing that serious drug abusers were not as likely to appear in the work force as the media suggested, that effective strategies for dealing with alcohol and drug problems in the workplace were very similar, and that a medicalized treatment strategy was a preferable option to punitive approaches.

As part of the federal drug legislation, a National Commission on Marihuana and Drug Abuse was established, and it produced two reports. The second of these, a comprehensive and scholarly volume entitled *Drug Use in America: Problem in Perspective* (National Commission on Marihuana and Drug Abuse, 1973), is of present interest

because of its inclusion of commentary and recommendations regarding workplace drug abuse. The notable features of this inclusion are the brevity of the workplace-relevant discussion (approximately 4 pages out of a 485-page volume), its clarity, its "isolation" from the other observations and recommendations in the volume, and the apparent lack of impact that the recommendations produced. Because of the prominence of this document and its intended role as a major influence on both public and private policy, the workplace-related observations (National Commission on Marihuana and Drug Abuse, 1973:384-387, 480) are worth detailed attention.

The report observes that increased employee drug use seems to be a recent phenomenon that employers generally choose to ignore. It summarizes a study by the Conference Board (Rush and Brown, 1971) that revealed

- (1) considerable interest and concern about the drug abuse problem in a selected group of firms,
- (2) a perception that heroin use among employees was relatively uncommon,
- (3) that the drug problem was greater for firms in large urban centers than for firms in smaller, less urbanized areas,
- (4) that the response to the drug-abusing employee is substantially "sterner" than that to the alcohol abuser,
- (5) that about 40 percent of the surveyed companies do not follow any particular pattern in dealing with drug abusers, and
- (6) that about one-third of the companies offer counseling or treatment and about a quarter immediately dismiss such employees. The Conference Board study also indicated that very few companies had formal written policies dealing with employee drug abuse. The commission conducted its own small study of 45

companies, finding that two-thirds reported no significant employee drug abuse problem and fewer than half intended to take any formal policy or programmatic steps.

The commission offered six distinctive recommendations:

- (1) management and labor should cooperatively undertake a comprehensive study of employee drug use and related behavior;
- (2) when "the nature of the business allows," employees with drug abuse problems should be referred to a counseling or rehabilitation program rather than be terminated;
- (3) in dealing with employee drug abuse, the business community should consider adopting "employee assistance" programs, using a management control system based on impaired job performance and attempting to treat the causes of the poor performance;
- (4) any such counseling or treatment should be fully confidential;
- (5) no job applicant should be rejected solely on the basis of prior drug use or dependence, unless the nature of the business compels management to do so; and
- (6) when preemployment drug screening is necessary, companies should establish appropriate procedures, including physical examination, and the results should be kept confidential.

It is noteworthy that these recommendations, seemingly somewhat more "liberal" than more recent recommendations emanating from the federal establishment, were published more than 15 years ago. As mentioned, these recommendations constituted only a tiny portion of

this major report and were far from being given "top billing." That workplace programming was not a high priority in the emerging "drug abuse industry" is reflected by total absence of any mention of employment or workplaces in the prestigious report of the Drug Abuse Survey Project (1972) that had been supported by the Ford Foundation.

### Why the Concern With Employee Drug Abuse?

What social forces underlay this interest in workplace drug abuse problems in the early 1970s, and why did this fledgling interest seem to "play itself out" until its reemergence in a different form in the mid-1980s? The glib answer to the question of the social sources of this movement is concern over the drug-using behaviors of the youthful cohort that was beginning to enter the work-place at about this time. This is surely one of the factors, but there are more subtle forces that deserve attention.

The first of these is the entry of additional numbers of minority group members into "mainline" employment in the late 1960s and early 1970s through the implementation of affirmative action programs. Whereas employment demands had previously led to the employment of many members of minority groups, affirmative action increased these numbers while notably introducing legal mandates to ensure equal opportunities for promotion and advancement. A careful reading of the media reports of the period reveals a concern over minorities bringing drug-using behaviors to the workplace, a practice that it was believed could spread throughout the workplace in almost contagious fashion.

A second force, related to the first, was the relatively large-scale implementation of methadone maintenance programs for opiate addicts (Trice and Roman, 1972; Scher, 1973), primarily in the Northeast metropolises, and primarily among minority group members. One of the major advantages of methadone was its presumed facilitation of the addict's entry into the work force and his or her movement back toward respectability. Again, a quite subtle fear in some

workplaces that employees on methadone maintenance would enter the work force and then resume and spread their opiate-using behaviors was a factor that supported the concept of preemployment screening. A third factor, which was not widely evident until later in the 1970s, was employers' concerns about the drug habits of veterans of the Southeast Asian conflict. This item was part of the agenda of the 1971 conference sponsored by Advanced Management Research (see previous section) and is mentioned, albeit subtly, in other publications. Fourth is the influence of the drug detection industry, which was fairly minor in the early 1970s but which had much to gain, were it to convince employers that biochemical screening for evidence of drug use should be widely adopted.

Given the apparent potency of these forces, what accounts for the absence of wide-spread adoption of workplace programs to deal with drug abuse in the early 1970s? It would appear that many critical "ingredients" were present, yet there is little or no evidence that corporate America was ready to implement these interventions on a large scale. The first and foremost explanation is the level of development of the technology necessary for this implementation. It is assumed that some form of DSP or EAP, or both, would be the basis for such programming. As is elaborated in the following section, EAPs were only in their infancy in the early 1970s, and it would be some time before there was consensus within workplace management that these basic techniques of intervention should extend beyond alcohol problems. It cannot be concluded that either EAPs were widely "in place" at this time or that corporate leaders were widely receptive to them (Roman, 1981).

It is also apparent that there was far from full confidence in the screening technology essential for DSPs. Although objective techniques of drug screening had definitely been developed by this time, they were largely limited to detection of opiates through urinalysis. It was clear that there was considerable concern about the accuracy of this testing (Wald and Hutt, 1972) and that there was little confidence in its claims to detect drugs other than opiates. Some initial discussion was

under way regarding the use of gas chromatography/mass spectrometry to identify drugs other than opiates, but this technique appeared to be far too expensive for administration on a large scale. Thus, the basic technology for the widespread implementation of efforts to deal with drug abuse in the workplace was simply not in place.

Second, despite the recommendations of the "blue-ribbon" National Commission on Marijuana and Drug Abuse, there was little evidence of the commitment of public resources to try to promote or facilitate the development of intervention efforts in the workplace. Furthermore, had there been such resources, there was no model to guide their utilization. At this time the National Institute on Alcohol Abuse and Alcoholism (NIAAA) was in the very early stages of designing and implementing a nationwide network of consultants and demonstration projects to promote work-based programs, which initially had alcohol problems as their primary concern. It was some time before there was knowledge about the effectiveness of this strategy. Closely linked to the absence of resources is the absence of a constituency group to promote attention or the allocation of public resources to deal with drug abuse problems in the workplace. It is clear from many other social policy developments that government action and constituency pressure are interdependent.

A third explanation is that the workplace simply did not have a base of experience to provide "readiness" for the implementation of interventions to deal with employee behavioral problems. As mentioned, EAP diffusion was only beginning, and relatively few organizations had programs in place to deal with employee alcohol problems. Thus, from this perspective, there also was no foundation in place. In this regard it may be important to note that the "mixed messages" regarding drug abuse as a deviant/criminal activity versus its being a problem deserving medically based attention reduced the clarity with which action might have been taken.

Fourth, as is reflected in some of the survey information collected by the federal commission, it is evident that many if not most of the

population of American employers did not perceive major drug problems within their workplaces. There simply was no firm research evidence on which to base such a conclusion, and it is clear that the intensity of reaction in the workplace did not match the "hysteria" evident in the brief flurry of mass media attention. The development of a firm research base to describe and differentiate the problem of drug abuse in the American workplace is a task that still remains to be done.

Thus, the significant but brief social attention to the problem of drug abuse in the workplace in the early 1970s did not lead to the large-scale development of programmatic activity. There were, however, a series of developments between the early 1970s and mid-1980s that are somewhat important in understanding current policy and the organizational environment surrounding drug abuse in the workplace.

### **Developments During the 1970s and Early 1980s**

One of the first formal efforts to address employee drug problems was evidenced in the 1973 policy adopted by the U.S. Civil Service Commission (now the Office of Personnel Management) covering all civilian federal employees exclusive of high-security operations. This policy was appended to the Federal Employee Alcoholism Policy, which was issued in 1971. This policy was a mixture of treatment and criminal orientations, with more of an emphasis on the former model. The policy suggested that drug abuse be dealt with through what would essentially be regarded as an EAP strategy, adding rather complex concerns related to criminal prosecution, should drug abuse problems be associated with the sale or distribution of illegal drugs. The policy was made somewhat foreboding by the appendage of detailed confidentiality guidelines that also described the intermingling of treatment and criminal procedures under various scenarios of employee behavior.

While constituting a new federal personnel policy, the Federal Employee Drug Abuse Policy was accompanied by neither mechanisms for the

enforcement of the policy's implementation nor resources necessary to support implementation. Federal departments and agencies were strongly encouraged to adopt such programs and provide resources for them, with a modest degree of consultation available through a specialized unit located within the Bureau of Occupational Health and Retirement of the Civil Service Commission. The reality, however, was that each agency had latitude in deciding how to go about program implementation, although in practically all instances the policy statement was made part of personnel management guidelines (Beyer and Trice, 1978; Hoffman and Roman, 1984a).

With some notable exceptions in several federal agencies, the policy produced a substantial number of "paper programs" throughout the federal establishment, with the guidelines in place but with minimal allocation of resources. Thus, there was little of the expertise necessary for realistic program implementation, nor were there structures through which the promises of the policy might be realized. It should be noted that the prevailing pattern of departmental and agency autonomy applied to the alcohol as well as the drug policy and has marked the style of EAP implementation for federal employees up to the present time.

The decade of the 1970s saw substantial efforts to address both alcohol and drug problems in the military. The characteristics of the military recruitment process together with the exposure during tours of duty in Southeast Asia of large numbers of military personnel to drugs that were illegal in the United States, were both factors that brought the issue of drug abuse in the military to the forefront much earlier than for other parts of the work force. The military, however, has mixed interests in publicizing its internal personnel and managerial problems in terms of support from the public, especially when such publicity may be genuinely frightening in its implications about military preparedness. Furthermore, because of the distinctions between the characteristics of the military as a "total institution" and its particular manner of bureaucratic governance, generalization of programming experience from the military to other workplaces has been minimal.

An important development in the early 1970s was the establishment of the National Institute on Drug Abuse, first as a unit within the National Institute of Mental Health, but shortly thereafter emerging as a sister agency to the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the National Institute on Mental Health (NIMH). NIDA's mandate was centered on a medical model of drug addiction and drug-related problems, and it was given authority to award and administer demonstration, treatment, prevention, and research grants that more or less were cast within a medicalized approach to the problems of drugs and drug abuse. NIDA's mandate was theoretically differentiated from the drug abuse unit in the White House, which has been known by various names and acronyms over the years, and is charged with oversight of federal efforts focused on drug enforcement and other criminologically oriented efforts to deal with drug use and abuse.

Yet the reality is that NIDA's activities are not fully medicalized, and there is a definite "criminal flavor" to some of the activities that have been funded by its grants and contracts. The existence of these two bases of activity within the federal government are another illustration of the tension between the medical and criminal approaches to dealing with the nation's drug problem. Beyond these bases for policy execution, even greater fragmentation is found in the distribution of policy formulation responsibilities across a myriad of congressional committees and subcommittees.

During the 1970s and into the early 1980s there was little evidence of either NIDA-supported demonstration projects or research activity focused on drug abuse in the workplace. Exceptions were the funding of several small contracts to the Stanford Research Institute for an overview of activities related to workers' drug abuse in a very small sample of companies and unions, one product of which was a set of guidelines for employers that essentially adapted EAP strategies to deal with employee drug abuse (Stephen and Prentice, 1978; see also Vicary and Resnik, 1982, for a later set of suggestions and guidelines in a pamphlet produced under a NIDA contract). There was, however, no office within NIDA that

focused on workplace concerns, nor were there specific personnel within the agency whose mandate was to provide assistance and guidance either to researchers or practitioners interested in this particular dimension of the drug abuse problem.

Lest this be interpreted as deliberate neglect toward the workplace on the part of NIDA, it should be pointed out that there was tacit agreement within the umbrella agency over NIDA, NIAAA, and NIMH that the "lead role" for dealing with workplace issues should be centered in the Occupational Programs Branch of NIAAA. As with many federal interagency agreements and understandings, however, this did not afford direct mechanisms for tapping budgetary support for workplace-related activities from either NIDA or NIMH.

Substantial personnel and programmatic changes occurred throughout all three institutes in 1981. These changes were brought about by the termination of these agencies' authorities for direct funding of service activities through congressional legislation that was strongly supported by the Reagan administration. This legislation transferred much of the programmatic support to block grants to the states, which also gained authority over allocations of these monies. The legislation essentially altered each of the institutes' structures, and they became agencies for the support of research initiated by scientists in the field and, to a much lesser extent, initiators of research projects funded through competitive contracts.

### The Office of Worksite Initiatives

Very shortly after the termination of direct support for services, the Reagan administration developed its strong and substantial interest in the drug abuse problem, supported very emphatically by both President and Mrs. Reagan. This interest led in 1985 to the establishment of the Office of Worksite Initiatives (OWI) within NIDA, reflecting the administration's interest and concern with employee drug abuse and the subgoal of a "drug-free workplace" as part of the goal of a "drug-free America."

OWI's initial mission has been to aid the diffusion and implementation of drug screening in the workplace. A variety of initiatives have been developed, including the drafting of standards and the development of certification for laboratories that process the body fluids taken in the drug screening process. In addition, OWI has funded a large research contract to assess the effectiveness of both pre- and postemployment drug screening, provided support for a "hot-line" to provide informational services to employers desiring to take action regarding drug problems in their workplaces, sponsored several research conferences focused on drug abuse in the work setting, and funded a small number of research grants directed toward better understanding of various aspects of the drug abuse problem in the workplace.

The emergence of OWI occurred simultaneously with three other changes that have all contributed to the rapid growth and expansion of program implementation in the workplace to deal with employee drug abuse. The first of these was the stimulation that the federal drug-free workplace initiative created for the organization and distribution of drug screening technology. Multiple laboratories and consulting organizations emerged very quickly, aggressively promoting their services to employers by using mainly the attention-grabbing technique of focusing on the many dangers and costs related to drug abusers in the workplace. This set of new businesses has functioned as a somewhat autonomous force in promoting the development of workplace screening of all types.

A second development also has a promotional facet and is largely based on opportunities for new revenue and organizational growth. This development is the expansion of for-profit alcoholism treatment programs to cover the treatment of drug abuse. This expansion of interest in broadening the scope of treatment beyond alcoholism began in the 1970s as centers found fewer and fewer "pure alcoholics" among their admissions, a difference closely tied to the age of the patient. Younger clients are very likely to be users of drugs other than alcohol and often

show a drug other than alcohol to be their primary drug of choice, even though some degree of alcohol abuse is commonly part of the presenting symptoms of the "polyabuser."

To a large extent this expansion of treatment availability has centered on cocaine dependence, corresponding to the apparently rising incidence of cocaine use among the "respectable" elements of society, many of whom are employed and thus have access to third-party health insurance reimbursement for drug abuse treatment. Treatment for cocaine dependence is quite similar or even identical to that for alcohol abuse, allowing a caseload diversification and expansion within treatment centers without any marked technological innovations. The effectiveness of treatment for cocaine-related problems is presently being challenged, but few data are available. Treatment centers also constitute a somewhat autonomous force in promoting both societal and employer attention to drug abuse problems, although it is clear that their messages frequently contradict or are confused with the messages of those promoting drug screening programs.

The third development occurred within EAPs, namely, the dual emergence of increased numbers of drug abusers in EAP referral caseloads and their host employers' growing interest in dealing with drug abuse problems. The interest of treatment centers in providing services to EAP-referred drug abusers, as well as the increasingly visible presence of promoters of drug screening, contributed to the growing salience of drug abuse issues among EAP service providers, including both internal EAPs and external organizations providing EAP services on a contract basis.

In their attempts to establish a role in workplace programming as well as to develop supportive constituencies, the personnel of NIDA's OWI initiated a variety of interactions with representatives of the EAP field. At first these contacts were not constructive: OWI representatives and some of their drug-testing provider constituents promoted the notion of DSPs as the primary and most important means of dealing with the workplace drug abuse problem,

and EAP representatives tended to hold fast to minimizing drug screening and utilizing EAP techniques as the primary modality for dealing with the employed drug abuser. Underlying this relatively short-lived climate of conflict between the two groups were the criminal and medical models of drug abuse problems, with OWI holding a position somewhat between these two models and EAP representatives strongly committed to a medicalized approach.

This conflict was largely resolved by OWI's movement toward a position of EAP advocacy, urging to a degree that offers of assistance through generic EAP mechanisms follow the identification of employed drug abusers through DSP mechanisms. This is not to say that all of the differences have been resolved, but, as described later in this paper, there is clear evidence that EAPs and DSPs can and do coexist and that the potential for genuine cooperation has been at least partially realized in some cases.

### **EMPLOYER INTEREST IN ALCOHOL PROBLEMS**

The principal mission of this paper is to offer a broad understanding of the potential contribution of EAPs to efforts to deal with workplace drug abuse. Part of that understanding is centered on the context in which EAPs have arisen and on the foundations for their support. In the decades following the 1930s, slow but gradual changes in the institutional responses to alcohol problem issues became evident. Although a primitive version of the disease concept of alcoholism was present (Levine, 1978), the cultural residue of the prolonged experience with the temperance and prohibition movements, coupled with the preoccupations of the Great Depression, was a disinterest in problems of alcohol abuse and alcoholism. Change became evident when Alcoholics Anonymous (AA) demonstrated that simple and explicit "steps," coupled with an environment of acceptance and support, could produce recovery from alcoholism. Despite its apparent simplicity, one of the fascinating ironies of the AA strategy is the necessity of its reliance

on a medical model of alcoholism (Trice and Roman, 1970). This attachment to a medicalized concept has been critical for the broader roles AA has played in facilitating the growth of alcoholism intervention, especially in the workplace.

The steady entry of recovering alcoholics into the fabric of "normal" society, with these persons representing all social class segments, provided a sort of verification of the AA strategy and its disease model foundations. These processes were facilitated by the activities of the National Council on Alcoholism (NCA) designed to educate the public about the treatability of alcoholism, the illness (Sonnenstuhl and Trice, 1986). It is important to note that there has never been a highly visible, reputable coterie of recovering drug addicts who have paralleled AA's organizational activities, nor has there been a voluntary organization centered on a disease concept of drug addiction paralleling NCA. Among NCA's activities was the promotion of the workplace as a setting for alcoholism rehabilitation (Presnall, 1981; Trice and Schonbrunn, 1981).

Without an adequate survey data base, it is difficult to evaluate the success of NCA's efforts in terms of public attitude change by the end of the 1960s. One notable consequence of these efforts, which some regard as extremely important in creating the eventual broadening of the concept of alcoholism as a treatable illness affecting large numbers of the population, was the legislative decision within the American Medical Association in 1955 to regard alcoholism as an illness. Furthermore, organized labor had an early interest and involvement in the activities of NCA at both the national and local levels, and there is no doubt that labor's early efforts at some bargaining tables to provide coverage for alcoholism treatment created both a foundation and an impetus for later efforts. It is definitely to NCA's credit that by the end of the 1960s many states had some form of effort to provide treatment services for alcoholism, but the image of most of these services was their availability to public inebriates.

In many ways based on the influence structures of NCA, and facilitated by the presence in the U.S.

Senate of Harold Hughes of Iowa whose openness about his own recovery experience was reflected in political advocacy (Beauchamp, 1980), the alcoholism-as-a-disease movement achieved what appeared to be a major triumph in the establishment of NIAAA in December 1970. Although this move resulted in part from the influence structures of NCA, one should not underestimate the direct impact of the persistence and charisma of Senator Hughes, who in organizational terms was a critical "idea champion." Nevertheless, care should also be taken to recognize the many unheralded giants of the past in AA, NCA, and organized labor on whose shoulders Senator Hughes was able to stand.

In some very significant ways, NIAAA represented a continuation of the activities of NCA. As a federal agency, however, its personnel were recruited through open bureaucratic procedures that resulted in the presence of very few recovering alcoholics on the NIAAA staff. More importantly, it brought to the alcoholism field many times the resources than had previously been available. These resources included funds for public education about alcoholism, which could build on NCA's earlier activities. However, both the projects mandated by NIAAA's enabling legislation and its own initiatives went far beyond the scope of the efforts in which NCA had been engaged, most of which were concentrated at the level of local affiliate councils rather than as campaigns or programs of national visibility.

Despite the interrelationships in the early days of NIAAA's development, NCA leaders later became extremely critical and disappointed in NIAAA's pursuit of its perceived mission. This disappointment was generally not the case for funding from NIAAA to NCA for workplace-related programming, for in this area the NIAAA monies were extremely generous and, indeed, permitted NCA broad latitude to test a particular labor-management programming model, albeit with limited success.

The mission of NIAAA is captured in the goal of mainstreaming alcoholism into the health care

delivery system, a goal that might be viewed as continuous with NCA's longterm efforts to medicalize public attitudes. In contrast to NCA, NIAAA had access to resources through demonstration project grants and other grant mechanisms, which led to a considerable increase in the availability of alcoholism treatment services directed toward the norms and lifestyles of the middle classes and in health insurance coverage to pay for those services. The demonstration projects had the effect of generating constituency groups to lobby for NIAAA's funding and to provide other support for the mainstreaming effort. It is not correct, however, to infer that these demonstration projects or contract support emanating from NIAAA were the direct precursors of the large number of specialized, freestanding alcoholism treatment centers that arose during the 1970s.

For patients to flow into these centers, health insurance coverage for alcoholism treatment was essential, and it was here that NIAAA's impact was the greatest. The institute offered strong encouragement through formula grants, project grant support, and, ultimately, state-directed incentive grants to support state-level lobbying efforts to mandate health insurance coverage for alcoholism treatment. All of these efforts were critical to mainstreaming, but without a reliable source of clients covered by health insurance, there was little prospect for the system's growth and independent sustenance.

An additional element--routes for access by patients covered by health insurance--was necessary if alcoholism treatment paid for by third-party payers was to be utilized on a large enough scale to be a cost-effective addition to the health care system. It is here that the role of workplace programming becomes evident, for the employed population is most likely to be covered by health insurance and to be attracted to treatment facilities that are designed for working- and middle-class clients. Thus, the introduction, on a large scale, of referral routes for employed clients was critical if the mainstreaming process was to be successful. Although it was possible to target families and friends of alcoholics as the sources of referral and to undertake large-scale educational

programs to encourage such actions, the use of the industrial alcoholism program model as a means for creating these routes was very attractive and had an established track record of success (Presnall, 1981).

A crucial ingredient in NIAAA's construction of a new political economy of alcoholism intervention is what has elsewhere been called the "new epidemiology" of alcoholism (Roman and Blum, 1987a). The temperance movement's contribution to American culture was the notion of inevitable downward mobility accompanying enslavement to alcohol use (Gusfield, 1958), a construct that has been viewed more or less as a precursor to the disease concept of alcoholism (Levine, 1978). The imagery of the alcohol-troubled person in the immediate post-Prohibition era was the skid row bum.

The visibility of skid row inebriates in many American cities supported this image and offered an ambulatory moral lesson for the public (Rubington, 1974). Whereas AA had contributed many recovered alcoholics of middle and upper status backgrounds, this was only a partial counter to the skid row image. However, NIAAA undertook as a central theme of its public education campaign the idea that alcoholism was a disease affecting all social classes, that its unknown biological source put everyone at an unknown level of risk, and that, indeed, at most 5 percent of American alcoholics could be found on skid row (Beauchamp, 1980; Wiener, 1981). Publicity directed in support of the workplace programming movement at one point used the logo "Project 95" to indicate that it was directed at the 95 percent of American alcoholics not on skid row.

It may be parsimonious to view the construction of a new epidemiological distribution of alcohol problems as crucial to the mainstreaming strategy. Acceptance of the belief that alcoholism is found with equal likelihood at all social levels encourages the readiness to identify and refer employed alcoholics, who in turn utilize the new clinical facilities and have their treatment paid for through their health insurance coverage. It is also the case

that creation of a new epidemiology created political potentials for the alcoholism field through confirmation that its disease was, indeed, like any other, that everyone could be at risk, and that the social and economic welfare of the larger society was being undermined by agents more insidious than skid row inebriates, namely "hidden alcoholics" (Rubington, 1974).

These "hidden alcoholics" (exemplified by "Sam the Half Man," a cartoon character employee who erodes company profits through his on-the-job absenteeism, high scrap rate, and unpredictable behavior that disrupts his work group) were the targets of the workplace intervention programs that were to constitute a major new thrust for NIAAA's support. The initial marketing of workplace programs placed great emphasis on these costs and characterized them as being both hidden and in the billions. Thus, within the new epidemiology, the hidden alcoholic in the work force (and his counterpart in the home, the gin-sipping housewife) came to replace the skid row bum as the "typical" alcoholics, limited not only to blue-collar operatives but with particular attention to the middle or upper level executive with the liquor bottle in the desk drawer.

How does one explain the emergence of the EAP model? First was the necessity for the new workplace-directed effort supported by NIAAA to obtain its own identity, separate from predecessor activities such as the industrial alcoholism promotion effort conducted by NCA. Second, the basis for much of NIAAA's support of the broader program model was the contention that the efforts developed under the industrial alcoholism model fell far short of reaching the employed alcoholic population. This notion, however, remains a contention without a data base and exists despite some evidence to the contrary (Franco, 1960).

Third, there was a related belief that the stigma associated with alcohol problems precluded the success of the workplace effort at two levels: leaders in the workplace would not be receptive to adopting programmatic strategies with an alcoholism label, and the same reluctance would retard the use of such programs by employees.

Fourth, the possibility of a greater resource base and broader constituency was envisioned through a combination or intermingling of alcohol problems with other problems targeted by other agencies or organizations. This possibly contributed to the mainstreaming process, although this "force" is less overtly evident than the others.

The EAP model might be very simply summarized as resting on supervisory identification of job performance deterioration that cannot be explained by the conditions of work. Procedures generally call for the supervisor to use some form of constructive confrontation under these conditions. Should the employee elect to use the company program, it is strictly within the purview of the program coordinator to conduct or arrange for a diagnosis of the individual's problem and offer referral advice as to how the problem might be dealt with. Utilization of such assistance remains at the option of the employee, although it is evident that a degree of coercive pressure may characterize the encounters with the EAP as well as the earlier encounter with the supervisors. Should the individual be able to resume job performance after this intervention, routine followup occurs for a prescribed period, and the case is closed. Should performance remain below standard, disciplinary action and dismissal may be ultimate outcomes.

The critical difference between this model and the older industrial alcoholism model is the intense emphasis on supervisory avoidance of problem diagnosis and the focus of exclusive attention to job performance issues in dealing with the employee. The critical effect on program outcomes is that the job performance "screen" produces cases of many personal or "behavioral-medical" problems other than substance abuse, making the programs truly directed toward employee assistance.

There is no doubt that NIAAA attached its organizational identity to this innovation, as was demonstrated in an early and widely diffused pamphlet-type publication (NIAAA, 1973). This move coincided with the new occupational group launched with NIAAA funding, the occupational

program consultants (OPCs), and the importance of their having an identifiable and distinct ideology as well as a set of theoretical principles to guide their work (Blum, 1988).

The EAP strategy was not developed out of thin air. In part, NIAAA based its program design recommendations on the reports of outcomes associated with the Kennecott Copper "Insight" program, operated by a pioneer industrial social worker and referred to by NIAAA at that time as a "broadbrush" approach. This company's effort to provide assistance to employees with a whole range of personal problems was seen as generating a more desirable level of penetration into employee alcohol problems than was apparently evident in the case records of companies utilizing the industrial alcoholism strategy (Jones, 1975).

The research cited to back the value of the broader, job performance-based model was indirectly supportive at best. One example was a retrospective study of alcoholic employees wherein employees were asked to rate the sequential visibility of their different behaviors during the course of their alcoholism. Although equivocal, these data were taken to indicate that signs of job performance deterioration occur earlier in the alcoholism progression than the stereotypical symptoms of the disorder (Maxwell, 1960). A second effort was a carefully designed experimental study in a single organization. In this research effort, supervisors who received training lectures about troubled employees in general were significantly more likely than subjects who heard lectures about alcoholic employees to report that they would take action regarding hypothetical subordinates with alcohol problems (Trice and Belasco, 1968). The NIAAA interpreters of this study regarded the hypothetical behaviors as proxies for referral to a broadly focused workplace program and thus as support for moving beyond the industrial alcoholism strategy.

Because of fears that proper attention to employee alcohol problems would be diminished, the EAP model was for a time the subject of considerable controversy, but ultimately it was widely diffused and accepted. This diffusion effort played a major

role in shaping the contemporary alcoholism intervention enterprise in the United States. It has, however, resulted in some major changes that deserve comment.

The introduction of the EAP model for workplace alcohol abuse programming brought with it a shift in the behavioral expectations for supervisors. Implementation of the performance-based strategy automatically transformed the focus of programs from alcohol abuse to all nonwork factors that could affect job performance. As the program model was implemented across different types of organizations and occupations, an unexpected development occurred. Employees were recorded as coming for program services on a "selfreferral" basis, with these rates ballooning rapidly over time to the point that they are the major route for program use in most EAPs today. This trend in turn both reflects and affects the extent to which these programs are effective in dealing with employee alcohol problems. It also has considerable implications for their long-term effectiveness in dealing with employee drug problems.

### **SCOPE OF EMPLOYEE ASSISTANCE PROGRAMS**

Elsewhere the authors have provided a detailed description of the principal functions served by EAPs and their core technology (Roman, 1988b; Blum and Roman, 1989a). These functions are summarized in Table 1.

#### **Employee Assistance Program Distribution**

One of the remarkable features of EAPs has been the rapidity of their diffusion across American workplaces. Data on EAP prevalence were initially focused on major corporations (Roman, 1982). In 1972, 25 percent of the Fortune 500 firms had some form of program for providing constructive assistance to problem drinking employees; subsequent surveys revealed these proportions grew to 34 percent in 1974, 50 percent in 1976, and 57 percent in 1979, by which point the survey was asking specifically about the

presence of EAPs (Roman, 1982). There are no post-1979 national survey data on the prevalence of EAPs among the Fortune 500 corporations; however, the authors' own and others' informal estimates indicate that nearly all Fortune 500 corporations currently have an EAP. It is also evident that there is great variation in the level of investment in these EAPs.

In 1985 a telephone survey of 1,358 private-sector worksites with 50 or more employees (86 percent response rate) was conducted for the U.S. Department of Health and Human Services, and it revealed that 24 percent of the worksites offered an EAP (Kiehaber, 1987). Worksite size was significantly associated with the availability of an EAP: 14.8 percent of worksites with fewer than 100 employees had an EAP, compared with 28.1 percent of worksites with 100 to 249 employees; 34.7 percent of worksites with 250 to 749 employees and 51.7 percent of worksites with 750 or more employees provided EAPs.

A survey of 7,500 private-sector nonfarm business establishments was conducted in the summer of 1988 by the U.S. Department of Labor (1989) to collect information on the extent and characteristics of employer-instituted EAPs and drug testing. The survey revealed that 31 percent of employees who work in private-sector nonagricultural establishments have some form of employee assistance program coverage. The survey also revealed that employees in larger organizations were more likely to be employed in organizations that had EAPs. The range of EAP coverage is from 86.8 percent of those who work in organizations with 5,000 or more employees and 71.9 percent of those who work in organizations with 1,000 to 4,999 employees, down to 11.2 percent of those who work in organizations with 10 to 49 employees and 4.2 percent of those who work in organizations with less than 10 employees. Larger organizations are much more likely to have EAPs; most employees, however, work in smaller establishments. The prevalence of EAPs varied considerably by industry, ranging from a high of 76.1 percent in communications and public utilities establishments to 10.6 percent in construction establishments.

The survey also indicated that the majority (55.5 percent) of the EAPs operated through external contracts, whereas 44.5 percent were internal programs.

EAP diffusion is not limited to the large-scale private sector. In the early 1970s, the federal government mandated the establishment of EAPs for all civilian employees, but two research studies that involved onsite assessments and interviews regarding the nature of these programs in samples of federal installations revealed uneven implementation (Beyer and Trice, 1978; Hoffman and Roman, 1984a). Thus, although federal civilian employees are supposed to be covered by EAPs, each federal department or agency is responsible for finding the funds to support the implementation of the service, and enforcement is limited.

Much of the current growth in EAPs is in externally contracted services to accommodate the needs of smaller employers. There are, however, some smaller organizations with internal programs and some larger employers with external programs. A 1988 sample survey in the Atlanta standard metropolitan statistical area (SMSA) directed by the second author of this paper revealed that 55 percent of the worksites with 1,000 or more employees had EAPs, and 65 percent of them were internal programs. Forty percent of worksites with 500 to 749 employees had EAPs, with 80 percent of these programs based on external service contracts.

## PATTERNS OF EMPLOYEE ASSISTANCE PROGRAM UTILIZATION

Data from the study of 439 internal and external EAPs indicate that an average of 5 percent of employees used the EAP in the 12 months prior to the 1984-1985 data collection. Assuming low turnover and relatively low reutilization of the EAP by the same employees, a substantial number of employees use EAPs over a several-year period. Approximately 30 percent of the caseloads were composed of employee substance abuse cases, with

marriage and family problems the largest single caseload category.

Data collected in 1988 from the 1984 panel of internal programs revealed similar utilization rates, with approximately 1.5 percent of a work force using an EAP in a given year for their own alcohol or drug problem. Alcohol, as the primary drug of choice, outnumbered cocaine/crack as the primary drug of choice by almost 3 to 1 across the EAPs.

The 1984 data from the 439 organizations indicated that an average of 80 percent of the employees who had used the EAP for problems that were not related to substance abuse were on the job with adequate job performance one year after initial contact with the EAP. The comparable rate for alcohol and other drug problems was 66 percent. An average of 8.4 percent of the employee alcohol cases were reported as leaving the job involuntarily within the 12-month period after EAP access, with another 5.2 percent leaving voluntarily. Among the nonsubstance abuse cases, 9 percent left the organization voluntarily. These rates are similar for the internal programs for which data were collected during 1988.

Although alcohol and other drug cases constitute a minority of the EAP caseload (albeit numerically substantial), 54 percent of the EAP coordinators studied in 1988 responded that these cases take much more of their time compared with nonalcohol or drug cases. Another 28 percent responded that these cases take a bit longer. Sixty-five percent of the EAP coordinators indicated that alcohol/drug abuse treatment insurance coverage in their organizations was adequate, with 35 percent claiming that it improved between 1984 and 1988 and another 16 percent claiming it had deteriorated in their organization during the same time period.

Data collected by the present authors in 1988 from 1,961 managers in a southeastern organization with 55,000 employees indicated that 37 percent of the supervisors have formally referred an employee to the EAP at least once during the EAP's 12-year existence (Blum, 1989). In addition, a large proportion of the supervisors have suggested that

**TABLE 1** Core Aspects of Employee Assistance Programs

Aspect	Core Technologies	Core Functions
<b>Supervisory operations</b>	<p>Identify problem employees through documented performance deficits</p> <p>Provide consultation to supervisors in policy procedures and appropriate action</p> <p>Assist in constructive confrontation leading to motivation for behavioral change</p>	<p>Provide equity and due process for troubled employees</p> <p>Reduce supervisory burden of counseling troubled employees</p> <p>Retain employees in whom there is heavy investment and change their commitment to the workplace</p>
<b>Benefit management activities</b>	<p>Provide clinical/job diagnosis and suggest most appropriate regimen of care</p> <p>Increase workplace influence and control over providers of treatment/counseling</p> <p>Generate workplace attitudes that substance abuse is primarily a medical problem</p>	<p>Act to channel clients to most effective resources</p> <p>Control employers' health care costs</p> <p>Support a workplace culture with constructive orientation toward substance abuse rehabilitation</p>

an employee use the EAP but did not make a formal documented referral.

Supervisory referrals of subordinates were significantly more likely when the managers perceived top management support for the EAP, when they perceived EAP support by their immediate supervisors, when they believed the EAP helped improve organizational productivity, when they believed the EAP was an integral part of the company, and when they were familiar with policies related to the EAP and discipline.

### COMPARISONS OF DRUG SCREENING PROGRAMS AND EAPS

What are the similarities and differences among EAPs and DSPs? Implementation of any type of DSP may be viewed as a "technological short-cut" (Etzioni and Remp, 1973) for resolving what is perceived as a threatening intrusion into the organization from the external environment. DSPs are distinctively different from EAPs, both conceptually and strategically, but they share the common goal of providing a means for the employer to cope with the issue of employee substance abuse. The conceptual distinction is that EAP principles call for supervisory intervention only where there is evidence of deteriorating job performance, with the next step holding the employee responsible for correcting the performance decrement. DSPs, on the other hand, use the evidence of drug use as *prima facie* evidence that intervention is necessary, without the requirement that a performance decrement must be the basis for employer action.

Fitness-for-duty screening may overlap with the EAP in principle in that each is identifying problem employees based on objective criteria. DSPs differ otherwise from EAPs in that referrals to EAPs are based on evidence of job performance deterioration or on self, peer, or family referral. DSPs, on the other hand, are much more subject to bureaucratic review in terms of specific steps in taking urine samples and testing/ retesting the

samples for evidence of drug use. The strategy may thus be seen as less "mystified" than the confidentiality-bound EAP referral.

In contrast to EAPs, DSPs do not rely on professional clinical judgment, confidentiality from management, or employee trust. Indeed, DSPs have objectivity of measurement as their strongest value in contrast to what some might regard as the subjectivity of clinicians' identification of drug abuse "syndromes." It is further noteworthy that employees who are mislabeled through DSPs have a means for collective action and a potentially supportive constituency, whereas dissatisfied EAP clients (generally unknown to one another because of confidentiality) are not likely to form or have access to such a constituency.

EAPs and DSPs may overlap when drug screening is performed for employees who have gone through a treatment program and who are screened as part of a follow-up process to ascertain their abstinence from drugs. Many in the treatment community consider this step part of treatment and thus regard it as separate from other workplace screenings.

In what may be the most important area of overlap for the concerns central to this paper, EAPs can be coordinated with DSPs in that individuals who have verified positive drug screens can be referred for assistance. In unpublished remarks at a small conference of EAP specialists (including the present authors) sponsored by NIDA in May 1987, Dr. D. A. Macdonald, the White House special advisor on drug abuse stated that the Reagan administration believed that workplace drug screening would be accepted by the American people only if it were considered fair and humane. Macdonald indicated that this suggested the possibility that the entry of drug screening into the workplace could be coupled with an already acceptable program, the EAP.

If this logic is correct, then medicalizing drug abuse (Roman, 1980) may be necessary for the drug screening technique to be acceptable to the vast majority of employees who do not use illicit drugs. Whereas drug testing may represent

bureaucratic social control in the workplace, its acceptability may rest on the social construction of beliefs that co-workers will be helped rather than punished if they test positive for illicit drug use. Yet because drug screening does not measure current use or impairment, or even history of usage, it may be difficult to apply "disease concept" labels to those who screen positive. Not all of those who come up positive need treatment, but medicalized policy statements, especially those advocated by EAP specialists, typically require that those with positive drug screens be offered counseling or rehabilitation. It is assumed in such a model that clinicians associated with an EAP will be able to discriminate effectively between those with positive screens who do and do not need assistance. Nonetheless, clinical screening is notorious for discovering some form of disorder among practically all referrals.

Thus, some individuals may be "unnecessarily" referred to counseling or treatment, with such a judgment variable across clinicians and non-clinicians and their different standards in defining a need for external assistance. This referral to treatment of individuals who may not require intensive treatment or who may not respond to treatment can ultimately contribute to escalating health care benefit costs. There are, of course, organizations that conduct drug screening but that do not offer EAPs before a test is ever performed or after a positive confirmation is made.

The U.S. Department of Labor (1989) survey referred to earlier concerning the prevalence of EAPs also presents data concerning the prevalence of drug testing in private, nonagricultural establishments and the overlap between drug testing and EAPs. The survey indicates that 19.6 percent of employees work in organizations with some form of DSP. The DSP may include only applicant drug testing or combinations of current employee drug testing, or both. The different types of drug screening may refer only to some categories of employees under some categories of conditions, such as probable cause. Drug testing of current employees under conditions of some random selection criteria is very unusual.

The Department of Labor survey can be extrapolated to examine the proportion of employees who work in establishments with DSPs, with the notion of "program" interpreted rather loosely to include organizations that have adopted policies but that have not actually implemented them by testing anyone or by testing anyone after an initial set of screenings. Thirty percent of employees who work in organizations that have DSPs, which may not even apply to them or other current employees, work for organizations that do not provide EAPs. More than one-half of the employees who work in organizations that have fewer than 250 employees and that have drug-testing programs are in settings that do not provide EAPs. This proportion may be compared with the 27 percent of employees in organizations with between 250 and 999 employees in which there is a DSP but not an EAP. More than 16 percent of those who work in establishments with 1,000 to 4,999 employees and 5 percent of those who work in establishments with more than 5,000 employees are in organizational settings that have DSPs but that do not offer EAPs.

The issue of drug testing without offering assistance to job applicants who test positive may be a short-term solution for a particular establishment. Over the longer term, however, the macrosocial consequences of excluding these individuals from a chance at gainful employment is a problem that policy makers will have to address. This issue might become more important in the future. Although at present there is no distinct constituency directly interested in the rights of those who are tested for drugs before employment, this situation may change if exclusion from the work force unintentionally contravenes the goals of other social policies, around which vested interests and constituencies are already organized. This possibility is detailed in the conclusion of this paper.

Of considerable concern are employers who test current employees for evidence of drug use but who do not offer EAPs to help persons with drug dependencies preserve their jobs. This practice is highlighted by the demography of the work settings with DSPs but without EAPs. Many of

these organizations are among the smaller and more numerous worksites and owing to their size may be harder to reach vis-a-vis providing an internal EAP service and are certainly less profitable contracts for EAP external providers. Furthermore, in terms of their insurance coverage, such organizations are less likely to provide third-party payment for alcohol and other drug treatment. Those that do may be in the precarious position of not being able to absorb the high costs of treatment in their premiums, compared with larger companies that spread risk over many employees. In addition, these organizations are likely to be located outside of large cities, which also exacerbates their ability to access quality substance abuse treatment options. Coupled with the increasing awareness of drug usage in rural America as both a real and perceived issue, more worksites may adopt those practices that seem relatively straightforward, simple, and inexpensive--such as urine sampling followed by drug testing through express mail arrangements with drug screening laboratories at distant locations.

The central concern about such arrangements is that these organizations may be the least likely to be able to afford due process protections and a bundle of other employee benefits and educational opportunities that larger employers are able to provide. The overall impact on employee welfare could be dramatic. Thus, the chance for abuse in smaller organizations, especially in rural locations, is an issue that must be addressed as drug testing becomes a more popular practice.

The 1988 Department of Labor survey reported that in those organizations in which some form of DSP was shown to have been in place, fewer than 1 million current employees were tested for drugs and nearly 4 million job applicants were tested during the 12 months preceding the survey. The rate of positive drug screens reported for job applicants was 11.9 percent. For current employees who were tested, the rate of positive drug screens was 8.8 percent.

There is reason to question the validity of these DSP "outcome" data. It is likely that the

respondents in the Labor Department survey rounded off percentages or tended to "guesstimate." Of considerably more importance is that the survey did not have control over the positions occupied by the workplace-based survey respondents. Thus, the respondents were in organizational positions with differential access to accurate information about drug testing results. Consequently, the information about the presence of policy and programs was more likely to be accurate, and the information about the reports of positive rates was less likely to be accurate.

The Department of Labor reports of drug testing prevalence that were published in January 1989 were almost immediately criticized by proponents of drug testing as being already out of date. In all likelihood, applicant drug testing, the most prevalent type of testing, has and will continue to increase in prevalence as an organizational policy, if not as an actual practice, unless there are regulations that prohibit it or specify the conditions under which it can be utilized. Drug testing of current employees, however, is not likely to increase dramatically except for safety-sensitive and national security positions. Given the direction of court decisions in which broad definitions of "sensitive" positions are being challenged in the context of required drug screening of current employees, it is likely that "safety-sensitive" and "national security" characterizations of occupations will have to be carefully justified if litigation is to be avoided.

Applicant drug testing seems at first glance to be the most reasonable kind of testing and provides a way for employers to exclude potentially troublesome and costly applicants from gaining employment in their organizations. Yet although the deterrent effect of drug testing is a plausible argument for applicant testing, there are nevertheless a series of issues that may be of concern to the communities in which the organizations exist in terms of appropriate assignment of responsibility for drug problems.

Currently, evidence about the impact of drug screening on employee drug usage is not available. Many of the organizations that have drug screening

policies do not systematically utilize them, indicating a disjunction between policy adoption and program implementation. Data collected in 1984-1985 in the authors' study of 439 private-sector sites with EAPs indicated that there were no significant differences in the drug- and alcohol-related caseloads of EAPs in organizations that did or did not perform preemployment drug screening. Companies that spot-checked their current employees using various procedures (locker searches, urine tests, etc.) also were not distinguished from organizations without these practices in terms of proportions of the work force that came to the EAP with drug or alcohol problems through its various routes of referral (Blum, 1989). It should also be noted, however, that another analysis of this data set indicated that drug abuse problems could be dealt with effectively through the EAP. In addition, the analysis suggested that the extent of successful attention to drug abuse problems within the EAP appears to be a function of the extent to which the program is integrated into organizational functioning and characterized by the presence of key elements of EAP core technology (Roman, 1989).

In this regard it is important to note that the military has reported decreased rates of those testing positive for illicit drug use during the years that their various drug screening programs have been in place, and these decreased rates are pointed to as evidence of the success of drug screening. Yet worldwide surveys based on self-reported use of alcohol among military personnel have shown that both alcohol consumption and problems associated with that consumption have not similarly decreased over time. Although there are some significant decreases in self-reports between 1982 and 1985, the larger increases in productivity loss associated with alcohol abuse between 1980 and 1982 (Bray et al., 1983, 1986) are certainly a relevant consideration if improved performance and predictability in the work setting is, indeed, an overarching goal covering all of these intervention

programs. Generally, the evidence from the treatment community of increases in polysubstance abuse and of the switching of drugs of choice as different chemicals are more readily available or culturally acceptable must have some bearing on workplace strategies for dealing with workplace effects of alcohol and other drug dependencies (Blum, 1989).

Furthermore, the impact of drug screening on employee morale, satisfaction, commitment, turnover, accidents, productivity, and other work-related outcomes is not known. A survey of a random sample of Georgia adults ( $N = 524$ , 67.5 percent response rate) conducted in 1986 by the authors indicated that 12.6 percent strongly approved of drug screening and 37 percent approved, whereas 28.1 percent disapproved and 18.1 percent strongly disapproved (3.1 percent responded that they did not know; Blum, 1989). The same data set, however, indicated that 75 percent of the employed individuals in the sample would be willing to be screened for drugs. All of those who strongly agreed with the hypothetical drug screening policy and 96 percent of those who agreed indicated that they would be willing to submit a urine specimen, in front of a witness, to a representative of their employer for the purposes of drug screening.

### **DRUG SCREENING AND EMPLOYEE ASSISTANCE PROGRAMS AND POTENTIAL FUTURE DILEMMAS**

The workplace is involved in dealing with both drug and alcohol issues, creating in many ways a "new world" of addressing human problems and their consequences. In conclusion, the authors review two "dilemmas" highlighted by issues involved in drug and alcohol programming in the workplace: potential conflicts among program strategies with very different intentions and the effects of broadly scoped services provided by employers.

## MICRO-ORGANIZATIONAL MOTIVES AND MACRO-SOCIAL CONSEQUENCES

Many issues discussed here are highlighted by an interpretation of the findings in the first six months of a two-year study of the job performance of employees of the U.S. Postal Service who were drug positive at their preemployment screen as compared with those who were drug negative at the preemployment screen. Perhaps the best designed study of the effects of applicant drug testing on job performance, this study is being conducted on Postal Service employees at 21 locations around the United States (Office of Selection and Evaluation, U.S. Postal Service, 1989; Normand and Salyards, 1989). The essence of this research design is that those with positive preemployment drug screens were nonetheless hired, allowing a follow-up of their work performance compared to those who screened negative.

Drug test results were obtained by the researchers for 5,465 job applicants. Traditional personnel selection practices and other factors not related to the drug test were used, with 78 percent of the eligible job applicants who tested negative for drugs eventually hired, compared with 69 percent of those who tested positive. The 4,375 applicants who were hired represent the study sample. Within this sample, there was an overall drug-positive rate of 8.4 percent at the preemployment screen.

Although the study will follow for two years the job performance of those hired, the preliminary results include the six-month effects on turnover and absenteeism. The absenteeism rates are approximately 43 percent higher among those who tested positive as compared with those who tested negative. However 38 percent of the total sample had not shown any absenteeism over the first six-months, suggesting that the distribution of absenteeism can certainly change. The turnover data are somewhat more revealing in that turnover does not vary according to whether the new hires were positive or negative at their preemployment drug test. Only involuntary turnover is

significantly different. Those who tested positive had a 40 percent higher rate of involuntary separation from the Postal Service. This rate represents about 1.5 times as many firings among those who were drug positive as compared with those who were drug-negative.

The base of the "40 percent higher rate" is interesting to examine because it constitutes a difference of 3.8 percentage points in the rate of involuntary turnovers between drug-positive and drug-negative new hires. Thus 9.5 percent of the drug negative persons were fired, as compared with 13.3 percent of the drug positive individuals (13.3 percent minus 9.5 percent = 3.8 percent and 3.8 percent of 9.5 percent = 40 percent). This difference is statistically significant--and substantively significant as well. Utility analyses could indicate its long-term costliness to the employing organization.

There is, however, quite a different perspective from which these data can be examined, namely, that 86.7 percent of the new hires who were drug positive at a preemployment screen are on the job and are maintaining job performances that do not warrant their being fired during their first six months of employment at new jobs. This perspective can be sharpened further by observing that this 86.7 percent "survived" a 90-day probationary period during which one might presume a more intense level of supervision than would ordinarily be the case.

A question that should be raised regarding the typical organizational policy of excluding drug-positive persons from employment is whether such persons stop their drug use when not hired and subsequently gain employment elsewhere, or whether their unemployment encourages increased drug use, which keeps them excluded from employment. These questions cannot be answered with the data sets that are currently available.

In light of the almost 87 percent of drug-positive persons who are performing at least well enough not to be fired six months after being hired, another policy question is raised. Does the practice of preemployment drug testing interfere,

even unintentionally, with affirmative action principles? The Postal Service data confirm the findings of other epidemiological surveys, which reveal that the odds of being drug positive are higher for blacks, males, and people between the ages of 25 and 35. An especial concern is that the drug-positive rate for blacks was twice that of whites (14 percent versus 6.5 percent), with blacks more than six times as likely to test positive for cocaine and almost twice as likely to test positive for marijuana, as compared with whites. Thus, the practice of preemployment drug testing is likely to exclude blacks from employment at greater rates than whites.

Taking a broad view, it may be argued that, in the case of these individuals, employment may be a strong buffer against continued drug use. Employment may also provide the conditions under which abstinence from drugs or undertaking treatment to bolster attempts at abstinence may be strongly encouraged, using some version of the constructive confrontation strategy that operates within EAPs. Thus, micromotives underlying work-entry drug screening that excludes drug-positive persons may influence macrobehavior that unintentionally contributes to a bifurcated society. The micromotives for keeping drug-positive job applicants out of the work force may also interfere disproportionately with the macrobehavioral goals of affirmative action in hiring. As a result, "a vicious circle" may ensue. Within such a circle, potential employers would be encouraged to use what economists call "signaling" to discriminate against a whole group of potential employees based on their ascribed characteristics (race) because of the information that characteristic is associated with a behavioral characteristic, drug use.

#### VARIATIONS IN THE SCOPE OF PROGRAM SERVICES

Although DSPs by themselves have a fairly constricted scope of activity, the design and philosophy of EAPs offer almost unlimited possibilities for service expansion. Many have

criticized the tendency in EAPs to become all things to all people. This benevolent expansionism often occurs at the cost of EAPs' performing their most important services for both employers and employees, namely, maximizing the potential for effective intervention in dealing with alcohol and drug problems.

One of the consequences of this expansion in EAP scope has been the perception that EAPs could be more cost-effective within their host organizations than they currently are. Such concern is usually found under the rubric of health care cost containment; the implementation of improvements in cost-effectiveness within EAPs is labeled managed health care.

Two aspects of health care cost containment raise important issues. First is the increasing tendency for EAPs, especially those operating under external contracts, to provide employee referrals with direct counseling for their problems. Usually, these arrangements allow a limit of six to eight counseling sessions, after which the employee would presumably be referred to a community resource if the need for further treatment is indicated. On the face of it, such a trend seems both efficient and a direct cost-cutting strategy, although there are no data from controlled studies to indicate that this is, indeed, the case. Still, the strategy raises numerous important questions:

- Can company- or contractor-administered "treatment" provide the same objectivity in terms of diagnosis, prognosis, and prescriptions for needed care as would obtain in an external treatment organization free from ties to the employing organization? The obvious context of this concern is that the employer may be motivated to minimize the costs of intervention in the interest of returning the employee to work as quickly as possible. In part, the concern over such employer conflict of interest was the basis for the original design of EAPs as mechanisms for external referral in the community, explicitly keeping the

employer out of the role of a deliverer of treatment services to employees.

- Is there assurance that either in-house or EAP service provider organizations are staffed by individuals who have the diagnostic skills to provide a full regimen of care to the people who seek their help? The current absence of standards governing either the staffing or operation of such EAP units is the basis for this concern.
- Can the company or external contract counselor break through the cover-up and denial that usually characterizes an employed substance abuser, particularly when it is evident to the employee client that the counselor is a company employee or direct contractor? Conversely, it would appear that such a perception would both encourage and bolster denial and cover-up, not only on the parts of the affected employees but also on the part of their peers and even their supervisors.

The second cost-containment concern centers around the provision of EAP services to employee dependents. Although it is apparent that some EAPs are providing substantial attention and services to employees' adolescent children with substance abuse problems, there is no data base available at present to specify the actual scope of such services through the EAP. Conversely, some EAPs are moving in the direction of limiting services only to employees because of the tremendous caseload growth that occurs when services are extended to dependents. Beyond the issue of reducing demands on EAP staff is the question of the extent to which dependent-oriented services actually increase the health care cost burden to the employer.

Concerns arise as the work-family nexus becomes more complex and the employers voluntarily and involuntarily adopt roles as providers of behaviorally oriented services to employees' family members and to entire family units. It is presently

clear that there are familial structural arrangements that are more conducive to productive employment and to the "smooth careers" of both men and women workers. To what extent can employer involvement in "counseling," a process that is frequently subjective and value laden, reduce the independence of family-oriented decision making, which presumably represents a basic American cultural value?

On the other side of this coin is the trend in some EAPs to be required by their host employers to provide "gatekeeping" or "channeling" referral for all employees and dependents who desire third-party reimbursement for any form of substance abuse or psychiatric service. There are reasons for suggesting that such an arrangement can, indeed, be effective in controlling costs for the employer while at the same time being beneficial to employees and their families by directing them to services that will be most effective for their problems. Arguments against such a strategy point to the choice of treatment as an implicit right accompanying health care benefits, as well as to the potential conflicts of interest that occur when the employer's agents and their perceived power and expertise dominate the choice of treatment.

In sum, the drug abuse issue in the workplace is far from being ignored. In the typical course of the emergence of social problems, the attention to this issue has been rapid, and the scope of social response has been broad. DSPs and EAPs are potentially complementary responses to drug abuse in the workplace, yet the potential conflicts between the two strategies should not be minimized. Experience is accumulating on a daily basis, and the workplace is concerned beyond the simplicities of ridding itself of drug abuse through dramatic but singular remedies. It is extremely clear that a broader base of well-designed empirical research is badly needed and that this research must extend beyond the rather mechanical approach of program evaluation to consider the theoretical and ideological implications of programmatic strategies that impact and rebound well beyond their targets at the level of the individual employee.

## REFERENCES AND BIBLIOGRAPHY

- Backer, T.E. (1987) *Strategic Planning for Workplace Drug Abuse Programs*. National Institute on Drug Abuse, Office for Research Communications. Pub. No. ADM 87-1538. Washington: U.S. Government Printing Office.
- Beauchamp, D. (1980) *Beyond Alcoholism*. Philadelphia: Temple University Press.
- Becker, H.S. (1953) Becoming a marihuana user. *American Journal of Sociology* 59:236-242.
- Beyer, J.M., and H.M. Trice (1978) *Implementing Change: Alcoholism Policies in Federal Work Organizations*. New York: Free Press.
- Blair, T.S. (1974) The relation of drug addiction to industry. Pp. 70-79 in H.W. Morgan, ed., *Yesterday's Addicts: American Society and Drug Abuse, 1865-1920*. Norman, Okla.: University of Oklahoma Press.
- Blau, P.M. (1963) *The Dynamics of Bureaucracy*, re. ed. Chicago: University of Chicago Press.
- Blau, P.M. (1974) *On the Nature of Organizations*. New York: John Wiley.
- Blau, P.M., and M.W. Meyer (1987) *Bureaucracy in Modern Society*, 3rd ed. New York: Random House.
- Blum, T. (1988) New occupations and the division of labor in workplace alcoholism programming. Pp. 205-221 in M. Galanter, ed., *Recent Developments in Alcoholism*, Vol. 6. New York: Plenum.
- Blum, T. (1990) The presence and integration of drug abuse interventions in human resources management. Pp. 245-269 in S.W. Gust and J.M. Walsh, eds., *Drugs and the Workplace: Research and Evaluation Data*. NIDA Research Monograph No. 91. Pub. No. ADM 89-1612. Rockville, Md.: National Institute on Drug Abuse.
- Blum, T.C., and P.M. Roman (1986) Alcohol, drugs and EAPs: new data from a national survey. *The ALMACAN* 16:33-36.
- Blum, T.C., and P.M. Roman (1987) Choices between internal and external employee assistance programs. Pp. 95-104 in S. Crim, ed., *Employee Assistance Programs in the Workplace*. Washington, D.C.: Bureau of National Affairs Press.
- Blum, T.C., and P.M. Roman (1989a) Employee assistance programs and human resources management. Pp. 259-312 in K. Rowland and G. Ferris, eds., *Research in Personnel and Human Resources Management*, Vol 7.
- Blum, T.C., and P.M. Roman (1989b) Purveyor organizations and the implementation of employee assistance programs. *Journal of Applied Behavioral Sciences* 24:397-412.
- Blum, T., P. Roman, and D. Tootle (1988) The emergence of an occupation. *Work and Occupations* 15:96-114.
- Blum, T., P. Roman, and N. Bennett (1989) Public images of alcoholism: data from a Georgia survey. *Journal of Studies on Alcohol* 50:5-14.
- Bray, R., M. Marsden, L. Guess, S. Wheless, D. Pate, G. Dunteman, and V. Ianacchione (1983) 1982 Worldwide Survey of Alcohol and Nonmedical Drug Use Among Military Personnel. Research Triangle Institute, Research Triangle Park, N.C.
- Bray, R., M. Marsden, L. Guess, S. Wheless, D. Pate, G. Dunteman, and V. Ianacchione (1986) 1985 Worldwide Survey of Alcohol and Nonmedical Drug Use Among Military Personnel. Research Triangle Institute, Research Triangle Park, N.C.
- Chambers, C., and R. Heckman (1972) *Employee Drug Abuse: A Manager's Guide to Action*. Boston: Cahners Books.
- Clark, N.S. (1976) *Deliver Us From Evil: An Interpretation of American Prohibition*. New York: Norton.

- Denenberg, T., and R. Denenberg (1983) *Alcohol and Drugs: Issues in the Workplace*. Washington, D.C.: Bureau of National Affairs.
- Drug Abuse Survey Project (1972) *Dealing with Drug Abuse: A Report to the Ford Foundation*. New York: Praeger Publishers.
- Etzioni, A., and R. Remp (1973) *Technological Shortcuts to Social Change*. New York: Russell Sage Foundation.
- Fein, R. (1984) *Alcohol in America: The Price We Pay*. Minneapolis, Minn.: Care Institute.
- Feuer, B. (1987) Innovations in employee assistance programs: a case study of the Association of Flight Attendants. In A.W. Riley and S.J. Zaccaro, eds., *Occupational Stress and Organizational Effectiveness*. New York: Praeger.
- Franco, S.C. (1960) A company program for problem drinkers: a ten-year follow-up. *Journal of Occupational Medicine* 2:157-162.
- Freudenheim, M. (1988) Workers' substance abuse increasing, survey says. *New York Times*, December 13.
- Gusfield, J. (1958) *Symbolic Crusade*. Urbana, Ill.: University of Illinois Press.
- Gust, S.W., and J.M. Walsh (1989) *Drugs and the Workplace: Research and Evaluation Data*. NIDA Research Monograph No 91. Pub. No. ADM 89-1612. Rockville, Md.: National Institute on Drug Abuse.
- Hoffman, E., and P.M. Roman (1984a) The effect of organizational emphasis upon the diffusion of information about innovations. *Journal of Management* 7:277-292.
- Hoffman, E., and P.M. Roman (1984b) Effects of supervisory style and experiential frames of reference on successful organizational alcoholism policy implementation. *Journal of Studies on Alcohol* 45:260-267.
- Holder, H.D. (1987) Alcoholism treatment and potential health care cost savings. *Medical Care* 25:52-71.
- Holder, H.D., and J.B. Hallan (1986) Impact of alcoholism treatment on total health care costs: a six-year study. *Advances in Alcohol and Substance Abuse* 6:1-15.
- Jones, O.F. (1975) Insight: a program for troubled people. Pp. 249-270 in R.L. Williams and G.H. Moffat, eds., *Occupational Alcoholism*. Springfield Ill.: Charles C Thomas.
- Jones, K.R., and T.R. Vischi (1979) Impact of alcohol, drug abuse and mental health treatment on care utilization. *Medical Care* 17 (Suppl. 12).
- Kiehaber, A. (1987) *The National Survey of Worksite Health Promotion Activities*. Washington, D.C.: Office of Health Promotion and Disease Prevention, U.S. Department of Health and Human Services.
- Kurtz, N.R., B. Googins, and W.C. Howard (1984) Measuring the success of occupational alcoholism programs. *Journal of Studies on Alcohol* 45:33-45.
- Levine, H. (1978) The discovery of addiction. *Journal of Studies on Alcohol* 39:468-522.
- Malabre, A.L. (1970) Drugs on the job: heroin, marijuana use by workers, applicants, climbs at some firms. *Wall Street Journal*, May 4.
- Maxwell, M.A. (1960) Early identification of problem drinkers in industry. *Quarterly Journal of Studies on Alcohol* 21:655-678.
- Molloy, D. (1986) Peer Intervention in a Union-Based Alcoholism Program. Doctoral dissertation, Columbia University School of Social Welfare.
- Morgan, H.W. (1974) *Yesterday's Addicts: American Society and Drug Abuse, 1865-1920*. Norman, Okla.: University of Oklahoma Press.

- Morgan, H.W. (1981) *Drugs in America: A Social History, 1800-1980*. Syracuse, N.Y.: Syracuse University Press.
- National Commission on Marihuana and Drug Abuse (1973) *Drug Use in America: Problem in Perspective*. GPO Stock No. 5266-0003. Washington, D.C.: U.S. Government Printing Office.
- National Institute on Alcohol Abuse and Alcoholism (1973) Occupational Alcoholism: Some Problems and Some Solutions. DHEW Pub. HSM 73-9060. Rockville, Md: U.S. Department of Health, Education and Welfare.
- National Institute on Drug Abuse (1986) *Interdisciplinary Approaches to the Problem of Drug Abuse in the Workplace*. DHHS Pub. No. ADM 86-1477. Rockville, Md: National Institute on Drug Abuse.
- National Institute on Drug Abuse (1987) Research on the Prevalence, Impact and Treatment of Drug Abuse in the Workplace. Grant Announcement No. DA-87-26 (July). National Institute on Drug Abuse, Rockville, Md.
- Normand, J., and S. Salyards (1989) An empirical evaluation of preemployment drug testing in the United States Postal Service: interim report of findings. In S.W. Gust and J.M. Walsh, eds., *Drugs and the Workplace: Research and Evaluation Data*. NIDA Research Monograph 91. Pub. No. ADM 89-1612. Rockville, Md.: National Institute on Drug Abuse.
- Office of Selection and Evaluation, U.S. Postal Service (1989) An Empirical Evaluation of Pre-employment Drug Testing in the U.S. Postal Services. Interim report to the Office of Worksite Initiatives, National Institute on Drug Abuse, Rockville, Md.
- Phillips, D.A., and H.J. Older (1977) A model for counseling troubled supervisors. *Alcohol, Health and Research World* 2:24-30.
- Presnall, L.F. (1981) *Occupational Counseling and Referral Systems*. Salt Lake City: Utah Alcoholism Foundation.
- Roman, P.M. (1980) Medicalization and social control in the workplace: prospects for the 1980s. *Journal of Applied Behavioral Science* 16:407-422.
- Roman, P.M. (1981) From employee alcoholism to employee assistance: an analysis of the de-emphasis on prevention and on alcoholism problems in work-based programs. *Journal of Studies on Alcohol* 42:244-272.
- Roman, P.M. (1982) Employee programs in major corporations in 1979: scope, change and receptivity. Pp. 177-200 in J. Deluca, ed., *Prevention, Intervention and Treatment: Concerns and Models*. Alcohol and Health Monograph No. 3. Washington, D.C.: U.S. Government Printing Office.
- Roman, P.M. (1988a) The disease concept of alcoholism: sociocultural and organizational bases of support. *Drugs and Society* 52(3/4):5-32.
- Roman, P.M. (1988b) Growth and transformation in workplace alcoholism programming. Pp. 131-158 in M. Galanter, ed., *Recent Developments in Alcoholism*, Vol. 6. New York: Plenum.
- Roman, P.M. (1990) Drug abuse intervention in employee assistance programs: results from field surveys. Pp. 271-286 in S.W. Gust and J.M. Walsh, eds., *Drugs and the Workplace: Research and Evaluation Data*. NIDA Research Monograph No. 91. Pub. No. ADM 89-1612. Rockville, Md.: National Institute on Drug Abuse.
- Roman, P.M., and H.M. Trice (1968) The sick role, labeling theory and the deviant drinker. *International Journal of Social Psychiatry* 12:245-251.
- Roman, P., and T. Blum (1985) The core technology of employee assistance programs. *The ALMACAN* 15:8-19.
- Roman, P., and T. Blum (1987a) Notes on the new epidemiology of alcoholism in the USA. *Journal of Drug Issues* 17:321-332.

- Roman, P., and T. Blum (1987b) The relation of employee assistance programs to corporate social responsibility attitudes: an empirical study. Pp. 213-235 in L.E. Preston, ed., *Research in Corporate Social Performance and Policy*, Vol. 9. Greenwich, Conn.: JAI Press.
- Rubington, E. (1974) *Alcohol Problems and Human Society*. Columbus, Ohio: Charles Merrill, Inc.
- Rush, H., and J. Brown (1971) The drug problem in business: a survey of business opinion and experience. *The Conference Board Record* 8:6-15.
- Scher, J., ed. (1973) *Drug Abuse in Industry*. Springfield, Ill: Charles C Thomas.
- Schuster, C.R. (1987) Foreword. P. iii in T.E. Backer, *Strategic Planning for Work-Place Drug Abuse Programs*. National Institute on Drug Abuse, Office for Research Communications. Pub. No. ADM 87-1538. Washington, D.C.: National Institute on Drug Abuse.
- Scott, W.R. (1987) *Organizations: Rational, Natural and Open Systems*, 2nd ed. Englewood Cliffs, N.J.: Prentice Hall.
- Simon, W., and G.K. Lumry (1969) Alcoholism and drug addiction among physicians: chronic self destruction? *Drug Dependence* 1:11-14.
- Smith, S.M., and P.H. Blachly (1966) Amphetamine usage by medical students. *Journal of Medical Education* 41:167-170.
- Sonnenstuhl, W.J. (1986) *Inside an Emotional Health Program: A Field Study of Work-place Assistance for Troubled Employees*. Ithaca, N.Y.: ILR Press.
- Sonnenstuhl, W., and H. Trice (1986) *Strategies for Employee Assistance Programs: The Crucial Balance*. Key Issues No. 30. Ithaca, N.Y.: ILR Press.
- Sonnenstuhl, W., and H. Trice (1987) The social construction of alcohol problems in a union's peer counseling program. *Journal of Drug Issues* 17(3):223-254.
- Stephen, M., and R. Prentice (1978) *Developing an Occupational Drug Abuse Program*. Rockville, Md.: National Institute on Drug Abuse.
- Thompson, P. (1983) *The Nature of Work*. London: Macmillan.
- Thwing, E.P. (1974) American life as related to inebriety. Pp. 94-100 in H.W. Morgan, ed., *Yesterday's Addicts: American Society and Drug Abuse, 1865-1920*. Norman, Okla.: University of Oklahoma Press.
- Trice, H.M. (1965) Alcoholic employees: a comparison of psychotic, neurotic, and "normal" personnel. *Journal of Occupational Medicine* 7:94-99.
- Trice, H.M. (1966) *Alcoholism in America*. New York: McGraw-Hill.
- Trice, H.M., and J.A. Belasco (1968) Supervisory training about alcoholics and other problem employees: a controlled evaluation. *Quarterly Journal of Studies on Alcohol* 29:382-398.
- Trice, H.M., and P.M. Roman (1970) Delabeling, relabeling and Alcoholics Anonymous. *Social Problems* 17:468-480.
- Trice, H.M., and P.M. Roman (1972) *Spirits and Demons at Work: Alcohol and Other Drugs on the Job*. Ithaca, N.Y.: Publications Division of the New York State School of Industrial and Labor Relations, Cornell University.
- Trice, H., and M. Schonbrunn (1981) A history of job-based alcoholism programs, 1900-1955. *Journal of Drug Issues* 11:171-198.
- Trice, H., and J. Beyer (1984a) Employee assistance programs: blending performance-oriented and humanitarian ideologies to assist emotionally disturbed employees. In J.R. Greenley, ed., *Research in Community and Mental Health*, Vol. 4. Greenwich, Conn.: JAI Press.
- Trice, H., and J. Beyer (1984b) Work-related outcomes of constructive confrontation strategies in a job-based alcoholism program. *Journal of Studies on Alcohol* 45:393-404.

U.S. Department of Labor (1989) *Survey of Employer Anti-drug Programs*. Report No. 760. Washington, D.C.: Bureau of Labor Statistics.

Vicary, J.R., and H. Resnik (1982) *Preventing Drug Abuse in the Workplace*. National Institute on Drug Abuse, Drug Abuse Prevention Monograph Series. Pub. No. ADM 82-1220. Washington, D.C.: National Institute on Drug Abuse.

Voss, H. (1988) Drug use patterns and demographics of employed drug users: data from a national household survey. Paper presented at the Conference on Drugs in the Workplace: Research and Evaluation Data, National Institute on Drug Abuse, Washington, D.C., September 15-16.

Wald, P.M., and P.B. Hutt (1972) Drug Abuse Survey Project: summary of findings, conclusions and recommendations. Pp. 16-40 in *Drug Abuse Survey Project, Dealing with Drug Abuse: A Report to the Ford Foundation*. New York: Praeger Publishers.

Walsh, J.M., and R.L. Hawks (1986) *Questions and Answers: Employee Drug Screening: Detection of Drug Use by Urinalysis*. Rockville, Md.: National Institute on Drug Abuse.

Wiener, C. (1981) *The Politics of Alcoholism*. New Brunswick, N.J.: Transaction Books.

Wilcke, G. (1970) Growing use of narcotics saps industry. *New York Times*, April 6.

Winick, C. (1960) The use of drugs by jazz musicians. *Social Problems* 7:240-248.

Winick, C. (1961) Physician narcotic addicts. *Social Problems* 9:174-186.

Wrich, J. (1974) *The Employee Assistance Program*. Center City, Minn.: Hazelden Foundation.

## **THE MARKET FOR DRUG TREATMENT**

**Richard Steinberg**

Medical care is not an ordinary purchase. The purchaser hires someone else (typically, a doctor) to tell him or her what to buy. Most of the risk is borne by the patient--payment is not contingent on the success of the treatment. Payment for services may be prospective or retrospective and is often the responsibility of third parties (insurers or government), although responsibilities are often shared by the purchaser (through copayments, deductibles, caps, restrictions on eligible providers, and restrictions on covered services) and the general public (financing the implicit tax expenditures on employer-financed health insurance and on the medical deduction from personal income taxes).

Within this unusual market, the market for treatment of drug problems is unique. In many cases (and in all of the cases considered here), the purchase of drug treatment is a direct response to criminal activity by the customer, although not all customers are charged with this crime. Sometimes the purchase of treatment is voluntary, although it is commonly coerced, either implicitly (through threats of prosecution for possession or loss of employment) or explicitly (as a court sentence). When the service is purchased voluntarily, we have what Winston has called an "anti-market" in which people pay to *not* consume something.<sup>1</sup> Ideally, the service would change the addict's preferences for drugs, but this is not easy to accomplish. (The best minds on Madison Avenue were unable to change our preferences regarding the "New Coke," a much easier task than changing preferences for an addictive substance like cocaine.) Realistically, we must measure success more by our ability to minimize the social side effects of drug addiction than by our ability to conquer the addiction itself. For most illnesses, society has considerable sympathy for the victim. Sometimes the reason for this feeling is obvious,

as when the onset of illness is completely outside the victim's control. We have sympathy for older victims of lung cancer, even though their smoking may be the cause of illness, because they became addicted to cigarettes before they knew of the risks. Society's sympathies for the younger victims of lung cancer (who know about the risks they run) and for alcoholics are mixed, but there appears to be a near consensus against sympathy for drug addicts. The limits of public compassion are tested by calls for public subsidies for drug treatment. If such programs are to pass political muster, the case for them must be made in terms of benefits to nonaddicts.

This paper concerns the market (supply and demand) for drug treatment. Alcohol, tobacco, nasal spray, and other legal "drugs" are beyond the scope of this study. Only the market for *treatment* of drug problems is covered; the market for *drugs* themselves is not considered except insofar as treatment interacts with this market. After briefly surveying some relevant facts, the paper presents rationales for public intervention and a framework for policy analysis. A later section discusses the effects of various policies on market equilibrium, considering the interrelated markets for treatment and insurance coverage and some difficulties in empirical application. The paper concludes with a discussion of policy options to enhance supply, policy options to enhance efficiency, and policy options in the insurance market.

### **THE FACTS**

More than 1.8 million Americans have received treatment for drug or alcohol abuse or dependence (both referred to here as addiction) out of a population of addicts that is undoubtedly larger.<sup>2</sup> There are three major types of treatment: inpatient, residential, and outpatient. Treatment

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modalities include detoxification, maintenance, and drug-free outpatient.<sup>3</sup> Facilities are provided by the government and the for-profit and nonprofit sectors.

Addicts utilize many sources to pay for treatment. The federal government assists through Medicare and Medicaid. Eligibility for the medically indigent under Medicaid differs by state, and not all states cover such treatment. A sliding-scale fee structure is typical. State and local governments provide most of our nation's treatment, available to the poor at no charge or at steeply subsidized rates. Nonprofit hospitals (and, to a lesser extent, for-profit hospitals) accept a limited number of patients on a charity basis.

Medical insurance plans historically have played only a minor role in financing drug treatment, but this pattern is changing. Spurred on in part by state mandates,<sup>4</sup> 66 percent of health care insurance participants (a group that comprised 95 percent of the nation's employees) in the private sector were covered for drug treatment in 1986. Coverage was even higher for state and local government employees. In 1987, 86 percent of participants (93 percent of employees were participants) were covered for drug treatment.<sup>5</sup> Finally, the proliferation of drug testing has been accompanied by a concomitant increase in the demand for treatment as a first-step remedy for positive test results. This trend is of growing importance, for, in 1987, 30 percent of the Fortune 500 companies screened employees for drugs.<sup>6</sup>

Many of those who seek treatment do not do so voluntarily. Various sources indicate that perhaps 25 to 35 percent of patients are under court orders to seek treatment, and another 25 to 35 percent are implicitly coerced, seeking treatment after arrest but before sentencing. The remainder are self-referred, although many of these individuals have been heavily pressured by employers, friends, and family.<sup>7</sup>

## RATIONALE FOR PUBLIC INTERVENTION

### Welfare Economics and the Pareto Standard

No doubt it would be pleasanter to live in a world with less drug addiction, but from this fact we cannot automatically conclude that public intervention is warranted. Resources are scarce and social needs boundless. The subdiscipline of welfare economics is dedicated to determining when unregulated markets are optimal in the face of scarcity and when public diversion of limited resources to a particular need is worth the opportunity cost.

A state of the world (denoted an economy) can be described by the quantities of each "good" affecting each person. A "good" is defined as anything the consumer cares about, including nontraded values such as good health or freedom from crime. One economy is said to "pareto-dominate" another if no individual prefers the second economy and at least one individual prefers the first. (This definition derives from Italian economist Vilfredo Pareto.) Thus, pareto-dominance is established by unanimous preference. An economy is said to be pareto-optimal if it is feasible and not pareto-dominated by any other feasible economy. There are, in general, an infinite number of pareto-optima to choose from, and they differ in the distribution of real income.

Most economists would agree that the best economy is one of the pareto-optima (although there is no consensus on which one). The reason is simple: if an economy is not pareto-optimal, there is a feasible alternative that would make at least one person (more likely every person) better off without hurting anyone. Since the days of Adam Smith, it has been well known that when all goods are traded in competitive markets, the outcome is pareto-optimal (nowadays, this is known as the first fundamental theorem of welfare economics). Thus, when markets are complete and competitive, the only case for government intervention is a distributional one; society might

prefer an alternative pareto-optimum containing a different distribution of income. When markets are incomplete or noncompetitive, there is a (rebuttable) presumption that the market is not pareto-optimal, establishing a *prima facie* case for governmental intervention.

There are many reasons to doubt the applicability of the first theorem to economies containing drug addicts. First, the notion of consumer sovereignty underlying the pareto standard is debatable here. Second, markets are not complete. Relevant markets for trading certain side effects of addiction and for trading information do not exist.

### Addiction and Consumer Sovereignty

Economists are, with just cause, reluctant to prescribe what is good for a person. Generally, a person's own "revealed preferences" are taken as data so that any change in consumption resulting from an enlargement in an individual's choice set (the set of feasible combinations of goods) is regarded as proof of betterment. This reverence for consumer sovereignty is natural when consumers are well informed and preferences are stable. Furthermore, economists are typically wary of social decisions to overrule individual preferences, for they fear that such decisions open the door to the worst kind of paternalistic excess.

Psychologists, on the other hand, study the reasons why people do not do "what is best for them." The "medical need" paradigm overrules individual preferences entirely, replacing them with a determination by physicians of the amount of care a person should have to obtain the highest state of health possible within the constraints of current medical knowledge.<sup>8</sup> Despite these objections, most economists remain unpersuaded that the state can do better than individuals in determining what is good.

In cases of drug addiction, the economists' presumption is confronted with its severest test. First, consider the diversity of preferences evidenced by an addict who asks you to lock him up until he "kicks" the habit. This addict is, in effect, asking you to reduce the size of his choice

set, indicating that he does not now want to enjoy the consumption that would be revealed if he were later unconstrained.

Economic theories of addictive behavior fall into two general categories. Theories of "rational addiction" assert that decisions to consume drugs or kick the habit are made by individuals with stable preferences and full knowledge of the future consequences of their consumption decisions.<sup>9</sup> In such a setting, drug addicts may regret the circumstances of life that have caused addiction to be their "best" option, but they would never regret the choices they have made (given the circumstances). Theories of "multiple personality" assert that consumption of addictive substances alters the addict's preferences among goods, in effect making them into another person.<sup>10</sup> Prospective addicts may consider the impact of their choice on "the person they will become," but the theories differ as to how they make decisions and whether they will ever regret the decisions they have made.

None of the theories developed so far is fully comprehensive, but each can explain some observed aspect of addictive behavior. For example, Becker and Murphy's (1988) "rational" theory is the only one to explain why some addicts voluntarily undertake a "cold turkey" approach in their attempt to kick their habit. In contrast, Becker and Murphy's model cannot explain the pain of addicts who wish they could quit but cannot, or the behavior of the addict who wants you to lock him in a room until he has fully withdrawn. Some sort of "multiple personality" theory appears to be necessary to rationalize these aspects of behavior.

The application of these theories to policy questions remains underdeveloped, but some conclusions emerge. The "rational addict" would always prefer a gift of public money to an equal-sized public subsidy for drug treatment. Because addicts always do what is best (in terms of their own values), they will put money to its best use. If they are ready to kick the habit and want to purchase help in doing so, they can use their cash grant for treatment. But many addicts will prefer

to use the money in other ways, ways that bring them greater satisfaction. Thus, the case for public subsidy of treatment cannot rely on the addict's self-interest (as self-defined) if addicts are "rational."

A different conclusion emerges from some (but not all) of the "multiple personality" theories. A single physical person must, at various times, consider the interests of four "psychological people"--the potential addict, the potential person the consumer would be if she avoids addiction, the actual addict, and the reformed addict--each of which has different preferences that must somehow be reconciled. It is quite possible that the reformed addict will prefer a subsidized (or even coerced) treatment program over an equivalent sum of money, although during addiction the same person would feel differently. A self-interest case for subsidized treatment can emerge from such a model.<sup>11</sup>

One could argue that addicts are not perfectly informed; thus, their choices do not maximize their well-being. If they were fully informed of the consequences of drug addiction, one could conjecture that many would be willing to quit or, at least, not start. There is probably some (but not much) truth to this assertion: some addicts are suicidal, others value the experience of drug consumption very highly, and both groups would not change their behavior even if they were better informed. If it were only an informational problem, public education programs would be the obvious solution. If we knew for certain that each addict would want to quit if fully informed of the consequences, and that educational programs were expensive or ineffective at informing addicts, then a coerced treatment program would more efficiently serve the addict's self-interest. As a practical matter, however, this rationale is unpersuasive and overly paternalistic.

One could justify intervention by rejecting the principle of consumer sovereignty as it applies to drug addiction. Society can continue to care about the well-being of each of its citizens but still reject the notion that drug addicts are the best judges of their own well-being. Drug treatment may be a

"merit good"--a good that addicts systematically undervalue. The problem with such an approach is the same: where does such paternalism stop? Should society reject the self-valuations of skiers, Democrats, or listeners to disco music?

A valid distinction could, perhaps, be drawn in the case of addictive drugs. We might reject self-defined interest whenever behavior leads to objective decreases in physical well-being.<sup>12</sup> If we accept the "multiple personality" theories of addiction, we could draw a finer distinction. Consumer sovereignty is not as well defined--which personality is the one whose interests society should protect? Society need not accept the individual's resolution of this conflict. We could reject the self-defined interest of the addict in favor of the self-defined interest of the rehabilitated addict on grounds of objective physical well-being. Is it really paternalistic if the former addict will thank us someday for interfering with his previous preferences?

Another way society could decide which of the many consumer preferences possessed by an individual it wished to respect is to use the legal concept of duress. Decisions made under duress are legally suspect. Thus, if we lock an addict up (at his own request) until withdrawal is complete, we are not violating consumer sovereignty even if he begins to protest his incarceration. Withdrawal causes duress; his protests are suspect and should not be respected. One could extend this argument further, although it becomes less persuasive in extension. Once addicted, the addict's decision to continue using drugs can be regarded as one made under duress, considering that contemplation of withdrawal is quite stressful in itself. Under this theory, we would be justified in locking up an addict until withdrawal were complete even if the addict did not request such an action.

In summary, it is difficult to construct a case for public subsidies or coerced drug treatment based on the addict's own interest, for paternalism sets a dangerous precedent. However, addictive behavior raises unique doubts about the consumer sovereignty standard, and it may be possible to draw fine distinctions allowing limited rejection of

this standard. Ethical doubts about the wisdom of such a policy will remain; the case for public intervention can more soundly rest on the interests of nonaddicts in controlling addictive behavior, to which the discussion now turns.

### External Effects of Drug Addiction

An "externality" is an effect of market transactions (production, consumption, or trading activities) on third parties who do not control the transaction. For example, when one consumer purchases electricity from a power company, other consumers are forced to consume the resulting air pollution. When externalities affect only prices (denoted a pecuniary externality), they are not pareto-relevant, but when a market transaction directly affects the well-being or productivity of others (a technological externality), there is a presumption in favor of governmental intervention. Technological externalities generally cause a departure from pareto-optimality<sup>13</sup> so that governmental intervention has the potential to help some individuals and hurt no one.

Drug addiction causes a variety of external costs. Thus, when drugs are not illegal or otherwise regulated by government, we can expect addiction rates to be excessive. The exact sense in which it would be excessive is that the benefits to third-party victims from a cutback in drug consumption would exceed the (self-perceived) loss to addicts, so that, with suitable compensation, everyone's lot could be improved.<sup>14</sup> Some drug addiction remains in a pareto-optimum, but there would be less addiction than in an unregulated market.

If drug addiction causes external costs, then drug treatment causes external benefits. Thus, in a free and unregulated market, we would expect to see too little drug treatment, and some sort of subsidy may be warranted.

Some of the external effects of drug addiction are well known, although the extent to which they occur remains understudied. Addicts commit property crimes to finance their habit. Their demand for illegal drugs creates a market in which drug traffickers use force and fraud to maintain

monopoly power and reduce the threat of prosecution. Some drugs cause violent and antisocial behavior. Moreover, drugs can affect reaction time and judgment, leading to auto accidents, airplane or railroad crashes, and on-the-job injuries and fatalities. Drug consumption can also lead to unemployment and consequent receipt of public support, financed through distortionary taxation.

The control of contagious diseases has external benefits, and perhaps drug treatment is a similar case. When one individual is vaccinated, that individual helps others (by reducing the chance that the disease will be transmitted) as well as herself. Drug addiction appears to be similar, for addicts often support their habit by "pushing," initiating new users and later profiting by supplying them with drugs. In addition, drugs can spread in a clique through social pressures on nonusers.

Although the contagion model has considerable descriptive appeal, there is a relevant distinction from the perspective of externality theory. It is one thing to catch a disease from an unvaccinated carrier (who evidences no signs of the disease); it is quite another to decide voluntarily to start using drugs after interacting with another drug user. Unless new users are coerced or fooled into using the drug until they are addicted (as in allegations of spiked candy or ice cream), they are party to a market transaction and not victims of an externality. However, nonusers who are concerned about such external effects as crime are clearly made worse off every time there is a new user. From this perspective, contagion is not itself an externality, but it interacts with and worsens other externalities that result from drug addiction.

The "multiple personality" theories of addiction suggest an alternative rationale in which contagion is directly the source of an externality. One facet of the personality is unable to resist temptation and consequently consumes drugs whenever surrounded by other users. Another facet wants to avoid becoming an addict at all costs but is unable to control the behavior resulting from the first facet. This second facet, if it is regarded as a

separate person, is externally affected by contagious drug consumption. Unable to refrain from drugs when temptation presents itself, this physical person may vote for laws restricting drug availability and encouraging treatment of others in order to avoid temptation.

Intravenous (IV) drug users are thought to be the major vector for the spread of the acquired immune deficiency syndrome (AIDS) into the heterosexual population. Although the rationality or education of those sharing needles can certainly be called into question, there is no externality issue among IV drug users: each needle sharer is directly transacting with another needle sharer, and the transaction is purely voluntary. However, if one needle sharer knew he were likely to have AIDS and concealed this information from someone sharing the needle, there would be an informational externality. Here, there is no direct transaction between the parties on the important, good "information." The same analysis applies to interactions between needle sharers and nondrug-using sex partners. There is no externality without informational asymmetry, for the informed sex partner is the final link in a chain of voluntary transactions. Informational asymmetry is, however, quite likely here.

Finally, intervention in the drug market may be warranted to reduce statistical discrimination. Statistical discrimination occurs whenever employers are unable to ascertain the qualities of potential employees and so judge them by the average characteristics of the potential employee's ethnic or social class. Employers, unable to ascertain the drug status of potential employees, may discriminate against urban youths and ethnic groups that are thought to contain a greater proportion of addicts. When these groups are employed, it is at a lower wage to "compensate" the employer for the risk he is taking.

Drug use by some members of an ethnic class has external costs for other members of that class who will be victimized by statistical discrimination. Such use may have beneficial externalities for other ethnic groups, who will be in high demand if their perceived drug use is low. However, one

set of externalities cannot simply be cancelled against another--inequity is due to variation and not averages. Furthermore, the average quality of job matches (that is, whether the right worker will be employed in the right job) is degraded because of discrimination resulting from drugs. As a result, overall productivity will suffer.

In summary, it is very difficult to construct a rationale for intervening in the drug treatment market based on the interests of the addict. If we really want to make the addicts better off (in their own judgment), a gift of money is far superior to a subsidized or coerced treatment program. One can argue that addicts do not know what is in their own best interest, but there are dangers in the paternalistic overruling of anyone's preferences. Moreover, it is difficult for an outsider to determine whether a particular addict is unable to act in his own interest, for observations of addiction are always consistent with a "rational" model. Yet even if there is no interest in regulating addiction for the addict's sake, there is a clear rationale for intervening in the drug treatment market. Rational addicts ignore the harmful side effects of their addiction on others. Public intervention is justified to reduce these externalities.

### Some Welfare Economics of Insurance

Some goods are regarded as valuable simply because consumers desire them, and economists have little to say about such preferences. Other goods are desired as means to an end. It is most common to regard insurance as one such good. Insurance reduces the expected utility loss resulting from environmental uncertainty. The value of insurance thus depends on the individual's tastes (risk aversion) and the level of uncertainty.<sup>15</sup>

At the individual level, it is unclear why drug treatment insurance should have value. Whether or not we regard addiction as a disease, the initial choice to consume drugs is clearly under the control of the consumer so that environmental uncertainty is minimal. Indeed, there appear to be only three sources of uncertainty. First, there is uncertainty about whether (and how quickly)

consumption will result in addiction. A consumer planning to try cocaine just once might wish to purchase insurance to cover the possibility that he might become instantly addicted and need expensive treatment to stick to his plan. Second, there is uncertainty about future needs for treatment. A consumer may rationally decide to indulge and have no plans for treatment to kick the habit but may be wary about the possibility of being caught and ordered into treatment. Insurance thus reduces the financial consequences of the random event "getting caught." Finally, there is uncertainty about future choices. A young nonuser contemplating an insurance purchase may be uncertain about whether his tastes will change in the future and lead to drug use. Alternatively, he may believe he has stable tastes but is currently avoiding drug use because of the high current price. He is uncertain whether the future price will fall sufficiently to induce him to consume at some time in the future.

It is questionable whether most of the people who consume drugs worry very much about any of these possibilities. Many consumers would entirely discount the possibilities of becoming addicted or getting caught using drugs. Some are present oriented and neglect the future almost entirely. Some are oblivious to financial consequences, which would largely fall on others (their parents, their creditors, etc.). Many have low self-esteem and feel little desire to protect themselves against future consequences. Thus, the private value of insurance appears to be minimal.

The fact that drug consumers have little demand for *insurance* does not imply that they have little demand for *insurance policies*. An addict who knows she wants to purchase treatment would wish to purchase an insurance policy to reduce her treatment price. There is no reduction in the consequences of uncertainty here, merely an income transfer. Insurance companies seek to avoid writing such policies, but as a practical matter, they cannot entirely avoid this occurrence. The key distinction in terms of welfare economics is that pure insurance is automatically pareto-improving (if the seller of insurance is less risk averse than the buyer or is able to pool risks),

whereas insurance policies need not be. In this case, insurance policies are probably pareto-improving even though they do not provide pure insurance because the income transfer encourages the consumption of treatment and this reduces external costs suffered by those making the transfer. Many health insurance policies are purchased for a group--either a family or a set of employees. A family head might wish to purchase insurance to protect the family from the consequences of a choice by one of the other members to consume drugs. The key distinction here is that the family head regards drug use by others as a stochastic event with external consequences for the rest of the family.

Employers might wish to provide drug insurance for employees because of pecuniary externalities. When an addict receives treatment, future health care costs may be reduced. Indeed, it has been argued that the reduction in this patient's future health care costs would more than cover the cost of addiction treatment.<sup>16</sup> If this is so, then the firm's overall costs of insurance are reduced, allowing it to purchase more insurance or offer higher salaries for other employees or to increase the wealth of the owners of the firm. Thus, treatment of one addict has external benefits (mediated through the price system) on other employees and stockholders.

The externality in this case is pecuniary, not technological. Thus, this externality provides no basis for state intervention (such as mandated or subsidized coverage). In competitive equilibrium, insurance firms would offer drug treatment coverage to firms at a rate lower than the direct costs of treatment, and the optimal quantity of coverage would be purchased.<sup>17</sup> The incremental cost of drug treatment coverage would be set equal to the incremental aggregate health care costs (which may be negative). If drug insurance more than pays for itself (as alleged), insurance rates would be lower for those employers who provide such coverage.

There is another reason why drug treatment insurance may be of value to employers. Few employers wish to hire addicts, but one cannot be

sure at the time of hiring whether a particular employee is or will be an addict. Once addiction is discovered, it may be cheaper for the employer to pay for treatment than to fire the worker, for recruitment and training costs are substantial and on-the-job experience enhances productivity. Insurance thus brings the usual gain in expected utility by reducing financial risk, but this gain accrues to the owners of the firm rather than the insured party.

Yet the story is even more complicated because both parties have some bargaining power when employee drug addiction is discovered. The employee has bargaining power because it would be expensive to replace him. The employer has bargaining power because an untreated but experienced employee may be worth less than a raw recruit; consequently, the firm can credibly threaten to fire the addict if he does not seek (and personally pay for) treatment. Although the author knows of no formal models of this bargaining situation, it would seem that drug insurance with some sort of cost sharing, either explicit (such as copayment) or implicit (salary reductions or deferred raises), would emerge.

There is a subtler reason for employee provision of drug treatment coverage. It is difficult for employers to observe the individual productivity levels of each worker, and it is also difficult to observe drug addiction. If drug addiction reduced worker productivity and the firm had a policy of firing known addicts, then the worker would have an incentive to hide addiction as long as he could. During this period of hiding, the firm's productivity would suffer. If, instead, the firm subsidized treatment (through purchase of appropriate insurance or directly) and provided assurances of confidentiality, the worker might tend to come out of hiding earlier and firm productivity would be enhanced.

Given that insurance has value from a social welfare viewpoint, the question remains as to the optimal structure of insurance contracts. Insurance provides highly nonlinear reimbursement, with deductibles, copayment, ceilings, indemnities, and limits on reimbursable services and providers.

Copayment, indemnities, and restrictions on reimbursable services make sense as second-best corrections for moral hazard (the tendency of an insured to consume more services than he would if personally liable for the full costs), and deductibles make sense because the consumer undertakes only a small risk in order to economize on "loading" (administrative expenses by insurers). It is difficult, however, to understand the welfare value of ceilings.<sup>18</sup> Some recent progress has been made<sup>19</sup> but it is fair to conclude that a great deal remains to be done.

The issue of moral hazard is more complex when treatment has external benefits. Moral hazard causes individuals to consume more treatment than in their "private optimum," but this is precisely what we want addicts to do because treatment produces external benefits. Individual insurance companies would not obtain the full external benefits resulting from treatment, so they would continue to offer policies with copayment. There would be less copayment in a socially optimal system of insurance, with the optimum depending on the magnitude of external benefits and the responsiveness of addicts to the price of treatment.

Realistically, we cannot accurately estimate the socially optimal copayment rate. A law banning copayment for drug insurance policies would probably move us closer to optimality and seems like a sensible approach. However, the issue is complicated by two additional considerations: other sorts of moral hazard and reduced policy availability.

The reduction in the price of treatment caused by the elimination of copayment would not be restricted to externally beneficial services. The patient might devote expenditure increments to increased comfort during treatment (such as upgrading to a country-club type of residential facility) rather than more effective treatment, a clear moral hazard problem. But the chief problem for many addicts is inducing them to seek treatment in the first place, not inducing them to increase the amount of their treatment. Increased patient comfort would generate external benefits if

it led more addicts to seek initial treatment, mitigating the moral hazard.

Because neither the insurer nor the employer would obtain the full external benefits of treatment, elimination of copayment would require governmental coercion. In response, insurers might withdraw from the drug addiction coverage market. Government mandates could eliminate this problem if they required maintenance of a drug addiction coverage option in all health insurance offerings. However, employers would purchase a suboptimal quantity of this option, *ceteris paribus*. Thus, mandating elimination of copayment is not a sufficient policy to induce optimal drug addiction coverage. Policy options with respect to insurance are discussed in greater detail in a later section.

### Cost-Benefit Analysis

Externalities may establish a *prima facie* case for governmental intervention, but a great deal more information is required if government is to determine the proper form and magnitude of intervention. Cost-benefit analysis, properly done,<sup>20</sup> provides a complete guide to policy choice. It provides a set of techniques for processing information so as to choose the policy that leads to the best combination of fairness and pareto-improvement.

Externalities provide the principal source of departure from optimality, so the most critical data need is to determine the value of a reduction in the external effects of drug addiction. Having established that value, the next step is to establish the links between drug treatment options and the size of external effects following treatment. Finally, one must link the scale of treatment to public policy options, such as subsidies to clinics, tax breaks for treatment, or mandated insurance coverage for drug treatment.

The first link in that research chain is by no means an easy one. By definition, relevant externalities are not bought and sold, so there is no direct evidence from the market that reveals the value of a drug-free environment (or the cost of a drug-

threatened environment) to nonusers. Economists have developed two techniques for determining the value of nontraded activities (i.e., relevant externalities): the hedonic and contingent valuation methods.

Hedonic studies use statistical techniques to take advantage of information from trading activities.<sup>21</sup> Although no one buys "a drug-free environment" directly, varying quantities of this good are implicitly purchased as part of a package deal when nonusers decide where to live. Hedonic analysis attempts to determine what portion of the variation in price of the composite good (in this case, housing) is due to variation in each of its characteristics (size of the house, number of bathrooms, drug addiction rate in the neighborhood, quality of neighborhood schools, etc.). From this information, a demand curve for a drug-free environment can be estimated. This curve indicates the nonuser's willingness to pay for each possible level of the constituent characteristic of interest.

There appear to be no hedonic studies that estimate the value of a drug-free environment, but it might prove both feasible and useful to sponsor some. Feasibility depends on the availability of data on drug usage rates (or some reasonable proxy for them) by neighborhood. In conducting the study, the investigator should be careful not to overcontrol for confounding characteristics. For example, one would want to remove the confounding effects of house size on property values from the analysis by introducing an appropriate control variable, but the effects of variation in the crime rate should not be removed because one of the reasons people are willing to pay to avoid high-addiction communities is to avoid crime.<sup>22</sup>

One problem with the hedonic approach is that some of the externalities caused by drug addiction spill over neighborhood boundaries. Commuters, shoppers, and tourists who pass through a high-addiction community can be victimized by crimes committed by addicts, but their discomfort would not affect property values in the high-addiction community.<sup>23</sup> Thus, we could not estimate the

value of reductions in these externalities from variations in property values. Nonetheless, a hedonic analysis would be an important first step and place a lower bound on the value of control.

The contingent valuation technique employs sophisticated survey instruments that attempt to compensate for the respondent's lack of knowledge and to provide incentives for the truthful and thoughtful revelation of preferences.<sup>24</sup> Although an improvement on simpler survey instruments, the method is still subject to the vagaries of responses to hypothetical questions. However, unlike the hedonic method, the contingent valuation technique can provide an estimate of the value of controlling those externalities that spill over community boundaries. Furthermore, the technique can supplement the imperfect evidence provided by the hedonic method.

In conducting valuation studies of any sort, four things must be kept in mind. First, the benefits of externality reduction are not necessarily a linear function of the extent of drug addiction. The benefits may depend on the share of users in the population rather than the number, and there may be thresholds beyond which the problem becomes exponentially worse. Second, the benefits depend as much on characteristics of nonusers as on the characteristics of users. A study that only examined the effect of treatment on the addict without considering the environmental response would present a very incomplete picture.

Third, there are many ways of reducing the external harm wrought by drug addicts. Certainly, one way to do this is to treat the addiction, and one would want to know the success rate and cost of treatment programs. Again, in measuring the success of a drug treatment program, we should consider the extent of externality reduction, not just the "cure" rate. But if treatment programs are not very effective or are very expensive, alternative solutions (which reduce the external effects of drug addiction without attempting to cure the addiction) may be more efficient. Although a discussion of these alternative policies is beyond the scope of this paper, it is clear that precise estimates of the monetary-equivalent value of

treatment programs are required to determine the superior policy option.

Finally, there may be interactions between the success of treatment and the policy option that led the user to seek treatment. One reason is what may be called Freudian effects. Freud argued that when patients have to pay for psychotherapy, they work harder at getting better. If this principle applies to the drug treatment market, then programs that subsidize patient costs are less effective than alternatives. Another possible example stems from policies to make treatment facilities more inviting for those voluntarily seeking treatment. Although such policies may be effective in increasing the share of the addict population seeking treatment, they may also reduce the long-term effectiveness. Patients who have been through such programs may be more likely to suffer relapses, feeling that a return to treatment would not be too bad. These arguments are entirely speculative but deserve empirical study.

In a related point, current users might try very hard to quit on their own outside of any treatment facility (for their own reasons or to protect their families). If a public subsidy for treatment programs is available, they will reduce their outside effort and enter a program. Although they may work very hard for a cure within the formal treatment program, some of this effort is a substitute for outside effort, rather than a supplement. Thus, the net benefits of subsidized treatment would be reduced but not eliminated.

## MARKET EQUILIBRIUM

The last step in cost-benefit analysis is to formulate the links among various policy options and utilization of treatment services. We would like to know the extent to which various policy options increase utilization of treatment facilities; the effect of policies on the prices paid for treatment by patients, employers, and insurers; and the cost of various programs to the public. All of these questions can be answered using the economists' tools of equilibrium analysis.

### The Basic Model

Traditionally in economics, competitive equilibrium is defined by the intersection of supply and demand curves. The supply curve indicates the quantity offered for sale at each possible price, and the demand curve indicates desired purchases at each price. For prices above equilibrium, the resulting surplus (excess of quantity offered over quantity desired) places downward pressure on the price, whereas for prices below equilibrium, the resulting shortage places upward pressure on the price. At the price where the two curves cross, everyone desiring a purchase and everyone desiring to sell can accommodate that desire, and there is no further tendency for the price to move.

The market for drug treatment is much more complicated for three reasons. First, there are at least three interrelated markets to be analyzed: the market for drugs, the market for insurance, and the market for treatment. Second, quite a few parties desire the purchase, and each may face a different effective price (expenditure per unit of treatment) for the same physical purchase. For example, drug treatment may be partly voluntary and partly coerced, as addicts supplement court-ordered treatment. The addict would then pay one price while the insurance company pays another, with the two depending on the price charged by the treatment center and the details of the insurance contract (such as the copayment rate). The court ordering treatment would face a price of zero. Alternatively, an indigent uninsured addict may face a price of zero (or a low, subsidized price) while the public sector pays most or all of the price charged by the treatment center. Insurance contracts also involve several parties, as employer-provided health insurance is supplemented by personal purchases and partly subsidized by the state through the tax system. Third, in some cases the price charged depends on the quantity purchased, complicating both estimation and policy simulation.

These complications will be illustrated progressively. Let us consider first an entirely free market for drug treatment. Drug treatment is supplied by perfectly competitive firms who can

enter or leave the market costlessly in the long run, although the number and size of firms is fixed in the short run. There are no government subsidies for treatment, and there is no insurance coverage. Then, equilibrium is characterized in the standard way, as illustrated in Figure 1. With the initial demand curve  $D_0$  and short-run supply curve  $S_0$ , the equilibrium price is  $P_0$  and quantity is  $Q_0$ . If demand increases to  $D_1$ , the price initially rises to  $P_1$ , but this leads to excess profits at each treatment center, inducing entry of new firms which pushes the market supply curve to the right. The entry of new firms drives the price down, reducing excess profits per firm. The process continues until excess profits are zero, illustrated by the intersection of demand curve  $D_1$  and short-run supply curve  $S_1$ . Assuming, quite reasonably, that this is a constant-cost industry, the long-run supply curve (which connects long-run equilibria for different demand curves) is the horizontal line L.

### Court-Ordered Treatment and Demand

Court-ordered treatment affects the shape and location of the demand curve. To see this, we must first analyze the demand by individual addicts. Some would not voluntarily demand treatment at any price or would demand no more treatment than that provided for in the court order. In this case, the court is the only relevant source of demand. It is reasonable to assume that the court is relatively insensitive to the price paid by the addict, so we can approximate court-ordered demand by a vertical line, as illustrated in the first panel of Figure 2. Some addicts would voluntarily demand more care than the court orders but only if the price were low enough. For these addicts, the relevant demand curve is the dashed line illustrated in the second panel. Finally, some addicts desire more care than the court would order (presumably, court orders would not be necessary for these people) at any reasonable price. This case is illustrated by the final panel.

The market demand curve is the horizontal sum of individual demand curves, assuming that all demanders face the same price at any time.<sup>25</sup> In

Figure 3,  $D_1$  through  $D_3$  denote the individual demand curves for three different people. Assuming that they are the only consumers in this market, the market demand curve is the illustrated dashed line. If there were many more consumers and the height of the kink points on individual demand curves was uniformly distributed, then the kinks would become much less noticeable in the market demand curve. In the limit, market demand would be smooth and downward-sloping despite the kinks in individual demand.

### Insurance, Tax Breaks, and Other Price Subsidies

For a typical insured patient, the addict pays full price up to the deductible and then pays a fraction of full price (proportional to the copayment rate) for further increments in service until coverage is exhausted (ceilings). Past this point, the addict again pays full price. If total medical care expenditures by the patient exceed a threshold and the patient itemizes expenditures on his tax return, there is an additional tax impact on price that depends on the patient's marginal tax rate.

Let us consider first a particularly simple insurance contract: the contract covers drug treatment from any provider, has no deductibles or caps, and has a copayment rate of  $C$ . Immediately, we are faced by the complication of three distinct prices: the price paid by the addict (denoted  $P_C$ , for consumer price), the price paid by the insurer (denoted  $P_I$ , for insurer price), and the price received by the treatment center (denoted  $P_P$ , for producer price). Unfortunately, a two-dimensional graph with quantity on one axis has room for only one of the three price variables. Luckily, the three are related to each other by the following formulae:

$$P_C = C \times P_P \text{ and } P_I = (1 - C) \times P_P.$$

Thus, given  $C$ ,<sup>26</sup> we can graph either of the other two prices, find the equilibrium for that price, and calculate the equilibrium for the other price by applying the formula to the first equilibrium price.

With no loss of generality, we will analyze the impact of insurance graphically using the consumer price. Copayment does not affect the desire of the consumer to purchase at each given consumer price (although it clearly affects the price the consumer will be given); thus, the demand curve is unchanged by this insurance policy. Likewise, the producer's willingness to sell at each producer price is not affected by copayment. However, we cannot directly graph the supply curve (which depends on the producer price) on a graph whose vertical axis is the consumer price. Using the formula above, we can indirectly graph the supply curve, translating each producer price into its consumer price equivalent. This has the effect of lowering the intercept and rotating the short-run supply curve (as illustrated in the first panel of Figure 4) to  $S'_0$ .<sup>27</sup> The new equilibrium producer price can be read off as the height of the initial supply curve  $S_0$  above the new equilibrium. This is clearly higher than the pre-insurance equilibrium producer price, so each treatment center would experience entry. This entry of new firms pushes the short-run supply curve to the right until it reaches  $S'_1$  (illustrated in the second panel), at which point the new producer price is returned to its pre-insurance level.

Analytically, there is no difference between the effect of an insurance contract with copayment and the effect of a price subsidy paid for by the state.<sup>28</sup> Either would decrease the price paid by the addict, increase the quantity of care purchased, and, by raising short-run profits, lead to long-run entry of new treatment centers. It can be shown that the total cost to the state or insurance company of this price subsidy is given by the two shaded areas in Figure 4 for the short run and long run, respectively (abstracting from administrative costs).

Some insurance policies do not require copayment, and sometimes the government subsidizes 100 percent of the cost (at least up to the quantity chosen by the addict). In these cases, it would appear to the addict as if the supply curve were horizontal at a price of zero, and equilibrium would be as illustrated in the first panel of Figure 5. Alternatively, there may be a binding cap on

services paid for by either of these mechanisms, resulting in the situation portrayed in the second panel. In the first case, the subsidy has the effect of greatly increasing equilibrium purchases of care; in the second, the subsidy has no effect on equilibrium quantity,<sup>29</sup> and merely transfers income from the state or the insurance company to the addict.

Now let us consider an insurance program with copayment and a deductible (that is, insurance payments are proportional to the excess of treatment charges over some threshold). To illustrate this, we must find a way to illustrate the point at which expenditures cross the threshold. To find this point, note that, at any point along the demand curve, a rectangle to the axes can be drawn. The area of this rectangle represents the consumer's total expenditures to that point because the height is price per unit, the length is the number of units, and area is height times length.

Thus, if we find the point on the demand line where the area under the rectangle exactly equals the deductible, we have found the point where insurance "kicks in." To the right of this point, copayment acts as a price subsidy as before. Equilibrium is illustrated in Figure 6.

Addicts who file federal income tax returns can receive a deduction for itemized medical expenditures in excess of a specified percentage of their adjusted gross income. The deduction amounts to a price subsidy, creating a wedge between net out-of-pocket, per-unit expenditures by the addict (the consumer price) and per-unit receipts of the treatment center (the producer price). The relation between the two is

$$P_C = (1 - m) P_P$$

where  $m$  is the addict's marginal tax rate. Thus, the effect of current tax treatment of medical expenses is analytically equivalent to the effect of an insurance policy with copayment and deductibles, and Figure 6 performs double duty.

### Intertemporal Effects

The demand for future treatment depends on the current supply of addicts, which, in turn, depends on current governmental policies in several ways. First, there could be cycling as a result of price effects. Any massive, successful treatment effort that reduced the supply of current addicts would lead to a fall in the price of drugs. Lower prices would allow more teenagers to experiment with drugs and to purchase a greater quantity of drugs for these experiments. In turn, this experimentation increases the likelihood that they will become addicts in the future. It is important to note that the effect is not so large as to negate massive, successful treatment efforts. This is just one side effect whose size should be estimated and whose impact should be considered. Furthermore, the size of this effect is partly under the control of government. If the treatment program were accompanied by a government policy that reduced the supply of drugs, then the tendency for the price of drugs to fall would be reduced or reversed.

Second, there could be risk compensation effects. Simply put, public actions that make products safer may induce consumers to take less care to protect themselves, so that the net increase in safety is smaller than projected. Applied here, potential drug users would be more likely to experiment with drugs if they felt that there was a cheap and painless antidote for addiction.

If the consequences of drug addiction to the user were drastically reduced through public action, substantial risk-compensation effects are likely. It is true that currently available public policies are unlikely to reduce the perceived personal harm of addiction by very much. Even if treatment were free, it would still be painful and time-consuming and would often fail. Furthermore, even if an individual's addiction were broken, the consequences of past addiction would largely remain. However, if the capability to implement a program that would drastically reduce the *perceived* consequences of drug use were ever to be developed, current nonusers might take less

care to avoid addiction and would experiment with addicting drugs.

For most public programs, risk-compensation effects reduce the net gains of the program but never turn an effective program into a counterproductive one.<sup>30</sup> In the case of drugs, the logical possibility of counterproductive effect is substantial, for drug addiction causes external harms. Again, this is largely a theoretical possibility, given the current technology for drug treatment, but it might become a substantive consideration at some future point.

### The Market for Insurance Policies

In the section above on insurance, tax breaks, and other price subsidies, the discussion showed how equilibrium in the drug treatment market depends on the quantity and type of insurance policy possessed by the addict. In turn, the equilibrium quantity and type of insurance depends on the appropriate supply and demand curves for insurance.

The demand for insurance policies is a derived demand, based on the increases in expected utility stemming from reduced financial uncertainty and (for those who know in advance they will need treatment) from expected income transfers. Anything that affects the expected future treatment market affects current insurance demand. For example, a reduction in the expected cost of treatment for the uninsured would reduce current demand for insurance.

There will be no attempt here to summarize the voluminous literature on estimating the demand for insurance coverage;<sup>31</sup> it will suffice to point out that all of the complications applicable to estimating the demand for treatment (discussed in the next section) also apply to the demand for insurance. Indeed, in the case of insurance demand, the problems may be even greater. Insurance is often purchased by the employer, presumably with the average employee in mind. Although the employer sets the general parameters,

employees may be presented with several options for coverage and can always supplement employer coverage with private coverage.

The purchaser does not simply select a policy from a nonlinear budget set (as in the demand for treatment) but must select from discrete, non-linear alternative formats (for exclusions, deductions, copayments, etc.) jointly with a level of coverage. The set of formats offered might change when government policies alter the demand for insurance on a large scale, so we have the complication of estimating a *mutatis mutandis* demand curve (that is, the demand curve allowing that which will change to change) rather than the *ceteris paribus* demand curve (holding all else constant).

For pure insurance (as opposed to insurance policies), the effective price is the difference between the yearly premiums and the expected annual payouts to the policyholder. In the insurance literature, this price is referred to as the "loading factor." It is quite difficult to obtain accurate data on this variable, and one would probably have to settle for a rough proxy for the loading factor, perhaps adjusted for tax considerations. Even so, the complexities of the insurance market may cause the equilibrium price schedule (within a format) to be nonlinear. Finally, demand for insurance depends on employment status, as most health care insurance is purchased by employers. Consequently, one would need to take account of the addict's lower probability of employment.

Employers are the major demanders of health insurance, and the considerations previously mentioned apply here. The federal tax code provides major incentives that increase employer demand for health insurance. Employer-provided health insurance is not regarded as taxable personal income, but there is no deduction from taxable income for the individual purchase of health insurance. This distorts choices, encouraging substitution of employer- for employee-purchased health insurance and, to a lesser extent, an increase in total demand for insurance. The previous discussion of the reasons why insurance has value to employers applies

here, for this value determines desired purchases.

Many of the same complications that apply to insurance supply estimation apply to insurance demand estimation--it is difficult to measure price, and insurers select a format as well as a quantity to offer for sale at each price. Four sectors provide insurance: the government (through Medicare and Medicaid and self-insurance of some government employees), for-profit commercial insurers (including mutual insurance companies), nonprofit insurers (chiefly Blue Cross and Blue Shield), and employer self-insurance. The aggregate supply is not simply the horizontal sum of supply curves of each sector because the different types of insurance are not perfect substitutes for each other. Additionally, some suppliers restrict sales to certain categories of consumers.

### Estimation and Simulation Issues

Although the theory of equilibrium enables one to predict the direction of change caused by public policies, one cannot predict the size of the changes in treatment utilization, price, or cost to the government without empirical estimates of the locations and shapes of the relevant supply and demand curves. In particular, many policies have the effect of reducing the price paid by consumers of treatment. To determine whether this reduction is worth the cost, it is critical to estimate the slope of the demand curve, which reveals the sensitivity of utilization to price.

For traded goods, economists typically employ observations on prices and quantities exchanged to estimate demand and supply curves. After using statistical techniques to hold constant all those factors affecting the location of the demand curve, the different equilibria observed (which are caused by differing locations of the supply curve) trace out, or "identify" demand. Similarly, by statistically removing the impact of variables that move the supply curve but allowing demand to vary, one can identify the supply curve. These procedures are illustrated in Figure 7.

This procedure breaks down whenever the observed prices and quantities do not represent the intersections of supply and demand curves. In some cases, there is excess demand for services and yet the price is not allowed to rise (for example, because the service is provided by a public clinic with distributional rather than profit-maximizing interests). In this case, the observed price and quantity point lies on the supply curve but not on demand, and the demand curve cannot be estimated. Techniques applicable for nontraded goods may be applicable here. In any case, this problem is only likely to infect the low end of the demand curve. It would still be possible to estimate the high end of the demand curve from observations generated by private clinics without waiting lists. As a rough approximation for the inestimable low end, one might simply continue the high-end demand curve downward in a smooth and plausible way.

It is not enough to estimate aggregate demand for treatment, for not all treatments are alike. Ideally, we would like to estimate treatment demand separately for public, for-profit, and nonprofit facilities and for each modality of treatment. In particular, we would like to estimate cross-price elasticities, which would indicate the effect on the demand curve for, let us say, for-profit hospital 28-day treatment of a decrease in the price charged by 6-month nonprofit facilities. We would also like to understand crowd-out effects between the public and private sectors. If government clinics increase their service provision, does total service provision rise, or does the government merely take over treatment for formerly paying customers? Finally, relapsers are likely to have a different responsiveness to price than first timers and should probably be sorted out. To some extent, relapsers are locked in to their original treatment facility because of the mutual gains in information from the first treatment. We might also wish to study separately relapsers who return to their original facility and those who go elsewhere.

Once again, the quality of service complicates estimation. The average quality of service is determined endogenously in a market setting. Any public policy that changed the location of

aggregate demand curve could affect the equilibrium level of quality, feeding back on demand. In effect, we would have two demand curves: the *ceteris paribus* curve, estimated from a cross-section and holding quality constant, and the *mutatis mutandis* curve, estimable from time series and allowing quality to vary endogenously. Although the *mutatis mutandis* demand curve would be harder to estimate, it is the one that is relevant for simulating the effects of policy changes on service utilization.<sup>33</sup>

Nonlinear prices complicate both estimation and policy simulation. Such prices occur when the price paid or received per unit is a function of the number of units purchased, so that total expenditures or receipts are not simply proportional to the quantity exchanged. Demanders face non-linear prices when they are offered quantity discounts or guarantees. For example, one treatment center offered free treatment for relapsers, although this policy was subsequently discontinued.<sup>34</sup> Suppliers face nonlinear prices when a client declares bankruptcy after paying for part of the services he received, or when a client reaches his insurance ceiling and the treatment facility continues treatment anyway on a charity basis.

As long as prices follow an externally fixed schedule, supply and demand curves are well defined. It makes sense to ask the question "What quantity would the addict wish to buy at each possible price?" even though the quantity decision determines the price, for suppliers could fix the price schedule in alternative ways and the form taken by this schedule is external to the demander. However, the simultaneity of the price and quantity decisions enormously complicates the *estimation problem*.

Health econometricians have recently developed statistical techniques to cope, in part, with the nonlinearity of prices,<sup>35</sup> and have utilized experimental data from the RAND Health Insurance Experiment to deal with simultaneity and

other problems.<sup>36</sup> They have not yet incorporated Hausman's econometric technique for nonlinear budget constraints,<sup>37</sup> but it is quite possible that great progress could be made if further thought were devoted to adapting this technique to health care demand.

Nonlinearities also complicate policy simulation. Price and income elasticities cannot be used in any simple way to estimate the impact of public policy changes, for inframarginal prices have distinct "virtual income" effects and nonconvexities lead to discontinuities. An appropriate methodology for performing policy simulations in this setting, developed by Feldstein and Lindsey,<sup>38</sup> could be applied fruitfully to medical demand as well.

### SOME POLICY IMPLICATIONS

A free market in drug treatment is likely to be suboptimal because drug treatment produces external benefits not entirely captured by the addict, his family, his employer, or his insurer. Some governmental intervention is warranted, although the optimal amount of intervention cannot be determined without a great deal more study. Increases in intervention beyond the current level can be justified if (a) they reduce the scope of the drug problem or (b) they reduce the financial consequences of nonpaying customers of treatment facilities or paying customers who thereby leave their families destitute.

If we are persuaded that current subsidy levels are inadequate, a number of policy choices remain. The government can stimulate increased use of treatment facilities by subsidizing the addict, his employer, insurance firms, or treatment facilities. Subsidies can be direct or in the form of a tax break. Finally, service can be mandated without subsidy. Three categories of policies are briefly considered here: policies to increase the supply of service, policies to increase the efficiency of service, and policies to intervene in the health insurance market.

### The Supply of Treatment

Treatment is supplied by government, nonprofit, and for-profit organizations. Although there may be no shortage of the higher priced for-profit hospital-based treatment alternatives, there appears to be a substantial undersupply at the lower end of the market. Press reports indicate that thousands of addicts must wait months to obtain treatment<sup>39</sup> and that treatment centers in Dade County, Miami, New York, Los Angeles, Texas, and Arizona have substantial waiting lists.<sup>40</sup> In New York, "addicts who seek treatment are routinely told to come back in weeks, even months. Most addicts don't wait passively."<sup>41</sup> Whereas some of those put on waiting lists or refused treatment may find treatment elsewhere, Barbara Butler, director of the James Center in Watts, estimated that "80% of those refused admission resume their drug habits."<sup>42</sup> It is not clear how typical Ms. Butler's observation is, but surely the impulse to seek treatment for addiction is an intermittent one.

Part of the problem is due to federal cutbacks. Prior to the 1980s, most drug treatment services were provided at little or no cost by public agencies or through public contracts with private nonprofit agencies.<sup>43</sup> Although these sources are still important, client fees, insurance payments, and third-party public payments through Medicaid have increased rapidly since then.<sup>44</sup> In part, the increase in insurance coverage is a direct result of government cutbacks--there was not much point in insuring to cover a free treatment. Federal block grants for treatment and prevention were cut by about 25 percent in 1981-1982, and it was not until passage of the 1986 Anti-Drug Abuse Act that the real value of federal block grants returned to its 1981 level.<sup>45</sup>

In general, we would expect a portion of federal cutbacks to be made up by increases at the state and local level and by increases in donations to nonprofit drug treatment centers. Recent unpublished data compiled as the 1987 National Drug and Alcoholism Treatment Utilization Survey (NDATUS) confirm that state spending has, indeed, risen substantially, while donations have remained essentially flat. This growth in spending

may reflect increasing perceived need as well as revenue substitution, so that federal cutbacks may have had a substantial impact on total expenditures. Although no careful econometric study has specifically addressed drug treatment block grants, the evidence from broader federal expenditure programs suggests that increasing need is the predominant factor. Most studies find that, after controlling for perceived need, state reactions amplify federal cutbacks (the so-called flypaper effect), and federal cutbacks cause only small increases in donations.<sup>46</sup>

Private for-profit treatment centers provide another alternative following federal cutbacks. The 1987 NDATUS indicates substantial growth in this component of the treatment sector, especially over the past five years. It seems clear that private for-profit treatment centers will arise automatically whenever clients are willing to pay for services. Entry of nonprofit alternatives is much more restrained, as nonprofit organizations do not appear to respond as rapidly to emerging market opportunities. A study by Henry Hansmann of four mixed for-profit/nonprofit industries found that the nonprofit share fell when demand grew rapidly.<sup>47</sup> Thus, excess demand is concentrated on the low end.

Federal policies to address the shortage can either concentrate on subsidizing the indigent so that they can afford for-profit care or subsidizing low-cost state and nonprofit clinics to allow them to expand their charity care. Financial subsidies to treatment centers can take the form of direct grants (as in the Hill-Burton hospital construction program) or tax breaks and can be made contingent on charity care or anything else the government wants. Tax breaks for treatment centers could take the form of an accelerated depreciation allowance for investment in new facilities. Because for-profit treatment centers appear to enter the market at a sufficiently rapid pace even without these subsidies, extending further subsidies would simply transfer income from taxpayers into the hands of for-profit investors. Nonprofit centers are already tax-exempt, so further subsidy would have to come in the form of grants. One reason nonprofit facilities are slow to respond to increased demand

is the difficulty of securing capital, as the nondistribution constraint effectively eliminates equity financing options. Exemption from the corporate income tax serves as a crude corrective for difficulty in expanding<sup>48</sup> but cannot help in providing the capital for starting a new organization. Furthermore, federal drug financing policy has explicitly precluded using block grants for capital, land, bricks, or mortar. Thus, consideration of capital subsidies, restricted to nonprofit treatment centers, is warranted.

Another problem of supply stems from community opposition to new treatment centers.<sup>49</sup> Siting an "obnoxious" facility (such as a public housing project, toxic waste dump, or prison) is not an easy task for any level of government,<sup>50</sup> and local opposition can tie up a treatment center for years.<sup>51</sup> Thus, it would be quite useful to study the extension of eminent domain to private treatment facilities serving the public interest. Eminent domain still requires approval by elected representatives; consequently, this policy would not be sufficient to eliminate slow construction owing to local opposition. The problem is more severe for new freestanding clinics than for new hospital-based programs at existing hospitals. This difficulty with expansion should be kept in mind when comparing the cost-effectiveness of the two alternatives.

### Policies to Encourage Efficiency

There is a long-standing debate on the merits of direct government provision of services versus government contracts with the private sector (including both for- and nonprofit facilities). In the drug treatment field, the debate is more theoretical than practical, as the vast majority of publicly subsidized treatment is provided through contracts and grants with the private sector. Presumably, contracting for services enhances efficiency, and, indeed, it can serve that purpose. However, there is good reason to believe that the current practices of government do not maximize the efficiency advantage over in-house production. Indeed, as practiced, the advantage may be minuscule.

Paulson nicely summarized the issues as they apply to human services.<sup>52</sup> The four most commonly cited advantages to contracting are lower cost and greater efficiency, increased flexibility, greater competition with enhanced consumer choice, and a better-quality, more effective service. He finds little evidence supporting these claims for the broadly defined human service industry.

Part of the problem is due to a failure to employ competitive bidding practices. What Paulson calls "the most complete study of contracting for human services to date" (p. 93) found that minimal competitive bidding has occurred. When bidding did occur, inexperienced social service agencies made unrealistically low bids that led to cuts in service or a lowering of quality, or both. Paulson concluded that the failure to employ competitive bidding procedures may be inherent in political systems.<sup>53</sup>

If political systems are inherently unable to employ competitive bidding procedures consistently, contracting will not result in more efficient production. A better approach might be to give each addict a voucher that would allow purchase of a specified dollar amount of services at any (certified) treatment center chosen by the addict. The voucher system extends the benefits of competition, already available for the high end of the market, to the low end. Treatment facilities that did not provide full value for the money would lose customers, and this prospect provides them with an incentive to improve. Facilities would further compete by experimenting with new treatment techniques and technologies, and society would benefit if any of these techniques proved successful. In equilibrium, a diversity of treatment technologies would reflect the diversity of treatment needs of different kinds of patients, an outcome far from guaranteed when service is provided or contracted for by a centralized government bureaucracy.

To be effective, vouchers would have to be restricted to certified treatment centers. The reason is simple: many addicts are not really interested in being cured. Addicts might prefer "treatment" at country-club type facilities that

would be pleasant to visit, although not very therapeutic. A facility that told its patients that "addiction is society's fault and you are merely a victim" might out compete a facility that told its patients that "only the addict can cure himself, and only through hard work and self-examination." Recalling that the chief reason for subsidizing drug treatment is to reduce externalities stemming from the choices made by drug addicts, it seems somehow inappropriate to tout the virtues of providing the addict with a greater choice of treatment options.

Certification would restrict the addict's choices, reducing the benefits accruing from competition. This problem would be especially acute in small communities where only one or two facilities would be certified. However, as long as there is more than one truly competing facility,<sup>54</sup> each facility would have a profit incentive to improve its value-for-money.

Effective certification would be quite difficult, however. Although it may be easy for the government to detect and restrict a facility's overinvestment in country-club atmosphere, some of the other less desirable forms of competition would be harder to regulate. The treatment firm would have a profit incentive to get around any regulations designed to control opportunistic behavior, and it would be hard to write a comprehensive set of standards to control the sort of appeals suggested above. Detecting violations of such complex standards would also be difficult, and one should expect prolonged, expensive legal challenges by decertified facilities. Even if we trusted addicts to *try* to choose treatments that were most beneficial to society at large, it is not clear that they have the capacity to do so. Paulson noted the general inapplicability of "greater consumer choice" for services in circumstances in which it is quite difficult for consumers to evaluate differences in quality. He also argued that consumers of human services have the least capacity to make such evaluations.

In sum, either competitive bidding in contracted-for services or provision of vouchers has the potential to lower costs and increase effectiveness

of treatment. However, practical and political considerations may keep these policies from achieving that potential.

### Insurance Options

One serious proposal is to subsidize the purchase of health insurance generally or for drug addiction specifically. However, health insurance is already heavily subsidized. As noted earlier, exemption of employer-provided health insurance from the federal personal income tax acts as a substantial subsidy. Most analysts feel that the level of subsidization is already excessive, contributing to the crisis in health care costs, so that further increases would be undesirable. Pauly concluded: "The nature and importance of the distortion from the tax subsidy to health insurance is generally agreed upon, although its magnitude is still open to considerable question."<sup>55</sup> Furthermore, the current system of tax subsidization favors those with higher income, and an alternative tax credit system has been proposed.<sup>56</sup>

Pauly points out one qualification to his conclusion: subsidization would not be excessive if there were sufficient external benefits to health insurance. In general, he concludes that external benefits are not sufficient, but he did not specifically address drug treatment. To the extent it is effective, drug treatment has substantial external benefits, so that an added subsidy *targeted toward this goal* might well be warranted. In addition, the current subsidy structure, by its very nature, will subsidize the wrong people. Many addicts are unemployed or face low marginal tax rates, hence receiving a smaller subsidy than nonaddicts.

The problem with simply subsidizing employer provision of drug treatment insurance is that such subsidies could not reach the unemployed or part-time employed addict. This is the segment of the addict population most likely to turn to crime; consequently, the external benefits of extending a subsidy to this group may be greatest of those for any group. Subsidizing individual purchases of drug treatment insurance is no better because it is

likely that many addicts would fail to purchase insurance at any price.

There may also be political problems with subsidizing a specific type of health insurance. Some will oppose such policies as apparently subsidizing criminals. Others will decry the inequity of subsidizing just one kind of insurance and attempt legislatively to link such subsidies with subsidies to other sectors of the health insurance industry, sectors that are already oversubsidized.

Finally, there is the difficulty of structuring incentives so that they encourage increased provision of services rather than mere expansion in insurance company profits. The insurance industry has large barriers to entry and exit and is heavily regulated by the state. As a result, one cannot rely on competition to eliminate opportunistic behavior of this sort.

If subsidies are politically unattractive, inefficient, or too expensive, mandated coverage appears to be an attractive alternative, and, indeed, many states have taken this option. As was pointed out earlier, the optimal mandate would incorporate a reduction in the copayment rate, but the author is not aware of any states that are currently taking this approach. In general, it would be difficult to write a proper practical mandate. Insurance companies may respond to state requirements by providing coverage only for cheap and ineffective treatment modalities. Any attempt to write into law financing for specific modalities would face charges of favoritism and unfair competition. Given our current ignorance of the comparative social cost-effectiveness of the different modalities, such charges would be hard to rebut.

Finally, mandates add to the cost of insurance coverage. It is clear that the total cost of the wide variety of state mandates is an important deterrent to employer-provided insurance coverage, although the impact of drug addiction mandates is undoubtedly smaller. Under federal law, any firm can elect to self-insure its workers and escape the strictures of state mandates. According to the Health Insurance Association, 70 percent of employees who work for companies with more

than 500 people are covered by self-insurance programs.<sup>57</sup> Although the typical self-insurance plan now provides some coverage for drug treatment, the copayment rate remains socially excessive. The reason, as was discussed earlier, is that some of the benefits to drug addiction control are external to the addict, any supplemental insurer personally contracted with by the addict, and the addict's employer.

Small employers are less able to self-insure, and, indeed, only 14 percent of employees at companies with fewer than 50 people are covered by such plans.<sup>58</sup> The only way they can escape mandates is to withdraw entirely from the provision of health insurance. Although current drug addiction mandates are clearly not a major factor, mandates in general have led to this problem. A study by Gail Jensen estimated provisionally that about "one in five small U.S. companies that didn't offer health insurance in 1985 would have implemented plans if their states' mandates were eliminated" (Jensen, 1988:307). A similar study released by the National Center for Policy Analysis estimated that "some 25% of the nation's 37 million people without health insurance lack coverage because of the mandates."<sup>59</sup> Again, companies have far less reason to oppose drug addiction coverage than other mandates, but the potential impact of a massive increase in the required coverage level should not be ignored.

A policy of coerced employer-provided insurance (whether self-insurance or commercially obtained) with reduced copayment would provide the optimal insurance package for employees, but this policy would have an important detrimental side effect. If insurance rates were adjusted in accordance with the firm's individual record (as is common for larger firms that are commercially insured and is implicit whenever firms self-insure), this practice would increase the cost of hiring potential drug addicts. As a result, employers would practice "statistical discrimination" to a greater extent than they do now, avoiding the hiring of members of groups that have a high probability of drug addiction.

Companies increasingly are turning to "cafeteria plans," which enable employees to pick and choose desired benefits. This otherwise desirable trend hurts drug addiction coverage for two reasons. First, as noted earlier, addicts would neglect the external benefits of treatment when deciding which insurance benefits to pick and would therefore select a suboptimal level of coverage. Second, as Diane Canova put it, "[a]lcohol and drug treatment (benefits) may not be picked up because of the stigma and personal denial associated with the problems."<sup>60</sup> State mandates should, perhaps, be reformed to ensure that drug treatment coverage is required, not elected, for all employees.

In any case, it is difficult to structure an effective policy that would improve on the free-market provision of health insurance, and many addicts are unemployed and uninsured. Unless this country turns to a national health insurance plan, policies that directly alter the drug treatment market seem superior to policies that alter the insurance market.

## NOTES

<sup>1</sup>Gordon Winston, "Addiction and Backsliding: A Theory of Compulsive Consumption," *Journal of Economic Behavior and Organization* 1(4), 1980, pp. 295-324.

<sup>2</sup>Dan Richman, Maria Rundinsky, and Jennifer Fine, "Drug Abuse May Present Growth Opportunity for Nation's Hospitals," *Modern Healthcare* 16, October 10, 1986, p. 46.

In 1985, it was estimated that there were 70 million citizens that had used drugs illicitly at least once, 23 million within the past month. Of these, 1.8 million were clinically dependent, and another 1.8 million exhibited drug-related pathology but were not judged to be dependent on drugs.

<sup>3</sup>A 1984 survey of programs that received money administered by the state alcohol and drug administration (this categorization omits most for-profit programs and some nonprofit and public programs) revealed that, of 272,042 admissions for drug treatment, 7,706 were to hospitals, 53,643 were to residential facilities, and 210,693 were to outpatient environments.

By modality, 38,625 entered detoxification, 38,713 entered maintenance, and 185,006 entered drug-free programs (William Butynski, Nancy Record, JoLynn Yates, and the National Association of State Alcohol and Drug Abuse Directors, Inc., *State Resources and Services for Alcohol and Drug Abuse Problems, Fiscal Year 1984*, U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, Rockville, Md., 1985). Similar statistics for 1986 reported in the *Journal of the American Medical Association*, 258, October 16, 1987, p. 2023, indicate that there were 385,593 drug admissions, 72.2 percent of which were on an outpatient basis. Heroin was the leading drug, but cocaine admissions more than doubled over the previous three years.

<sup>4</sup>By 1987, 36 states had mandated that substance abuse coverage be incorporated into insurance policies, but the type and number of treatments for which coverage was required varied considerably (Myk Cherskov, "Substance Abuse in the Workplace," *Hospitals* 61, June 20, 1987, p. 68). However, the Employee Retirement and Income Security Act of 1974 preempts state law and allows self-insured employers (who covered 42 percent of surveyed employees in 1985) to ignore this state mandate (Michael A. Morrisey and Gail A. Jensen, "Employer-sponsored Insurance Coverage for Alcoholism and Drug Abuse Treatments," *Journal of Studies on Alcohol* 49, September 1988, pp. 456-461).

<sup>5</sup>The author wishes to thank John Thompson of the Bureau of Labor Statistics for providing him with these data.

<sup>6</sup>Cherskov, "Substance Abuse in the Workplace."

<sup>7</sup>See Chapter 4 of *Drug Abuse Services Research Series No. 2, Extent and Adequacy of Insurance Coverage for Substance Abuse Services*. DHHS Pub. No. (ADM) 91-1778. Rockville, Md.: National Institute on Drug Abuse.

<sup>8</sup>For a discussion of the distinction between the economist's notion and the medical need concept, see James R. Jeffers, Mario F. Bognanno, and John C. Bartlett, "On the Demand Versus Need for Medical Services and the Concept of 'Shortage,'" *American Journal of Public Health* 61, January 1971, pp. 46-63.

<sup>9</sup>Examples of this type of theorizing include Gary S. Becker and Kevin M. Murphy, "A Theory of Rational

Addiction," *Journal of Political Economy* 96, 1988, pp. 675-699; George J. Stigler and Gary S. Becker, "De Gustibus Non Est Disputandum," *American Economic Review* 67, 1977, pp. 76-90; Laurence R. Iannaccone, "Consumption Capital and Habit Formation with an Application to Religious Participation," Ph.D. dissertation, University of Chicago, 1984; Robert J. Michaels, "Addiction, Compulsion, and the Technology of Consumption," *Economic Inquiry* 26, 1988, pp. 75-80; and Thomas A. Barthold and Harold M. Hochman, "Addiction as Extreme-Seeking," *Economic Inquiry* 26, 1988, pp. 89-106.

<sup>10</sup>Theories of this sort include Menahem E. Yaari, "Consistent Utilization of an Exhaustible Resource, or, How to Eat an Appetite-arousing Cake," Working Paper, Hebrew University, Center for Research in Mathematical Economics and Game Theory, 1977; John Elster, *Ulysses and the Sirens: Studies in Rationality and Irrationality*, Cambridge University Press, Cambridge, 1979; Winston, "Addiction and Backsliding"; Richard H. Thaler and H.M. Schefrin, "An Economic Theory of Self-Control," *Journal of Political Economy*, April 1981, pp. 392-406; and Thomas C. Schelling, *Choice and Consequence*, Harvard University Press, Cambridge, Mass., 1984, and "Economics, or the Art of Self-Management," *American Economic Review* 68, May 1978, pp. 290-294. The paper by George A. Akerlof and William T. Dickens entitled "The Economic Consequences of Cognitive Dissonance" (*American Economic Review* 72, June 1981, pp. 307-319) differs in spirit but is clearly relevant as well. Finally, psychologists have developed and tested models similar to those of economists. See, i.e., Karl E. Bauman, *Predicting Adolescent Drug Use: Utility Structure and Marijuana*, Praeger Publishers, New York, 1980, and the references contained therein.

<sup>11</sup>Even so, the problem of securing individualistic welfare comparisons remains. For discussions of the limitations of many ingenious attempts to construct welfare orderings from endogenous preferences, see Robert A. Pollak, "Endogenous Tastes in Demand and Welfare Analysis," *American Economic Review* 68, May 1978, pp. 374-379, and T.A. Marschak, "On the Study of Taste Changing Policies," *American Economic Review* 68, May 1978, pp. 386-391.

<sup>12</sup>For an interesting essay on "the material welfare approach" to welfare economics, see Robert Cooter and Peter Rappoport, "Were the Ordinalists Wrong about Welfare Economics," *Journal of Economic Literature* 22, June 1984, pp. 507-530.

<sup>13</sup>No departure from pareto-optimality occurs when a competitive secondary market arises in which third parties conduct transactions (explicitly through bribes and other payments or implicitly through court suits) with the generators of the externality. Such markets often do not exist. Thus, in terms of the first fundamental theorem, equilibrium is suboptimal owing to the incompleteness of markets.

Technological externalities can only establish a *prima facie* case for intervention. There is no guarantee that government is willing or able to make the changes necessary to obtain pareto-optimality.

<sup>14</sup>A market with unregulated drug is not pareto-optimal, whereas a market with an optimal reduction in drug use would be. Nonetheless, the latter need not pareto-dominate the former. Although the total gains are such that no one need suffer, as a practical matter, the winners often fail to compensate the losers in policies adopted by majority-rule political systems, preferring to keep the total gains for themselves. It remains controversial whether policies that only potentially pareto-dominate the status quo should be adopted.

<sup>15</sup>See Mark V. Pauly, "Taxation, Health Insurance, and Market Failure in the Medical Economy," *Journal of Economic Literature* 24, June 1986, pp. 639-641, for a brief survey of the theory of insurance.

<sup>16</sup>An additional complication has been neglected for the sake of clarity. Some individuals will receive treatment for addiction even if their insurance policy does not cover the costs of this treatment. For these individuals, future health care costs are lower whether drug insurance coverage is extended to them or not, and there are no pecuniary externalities. The impact of this complication on employer choice of plans is unclear, depending on whether those employees who would seek treatment even in the absence of coverage would accept lower compensation from other sources in return for employer coverage of these bills.

<sup>17</sup> We are looking, in a sense, at the optimum *ceteris paribus*, for there are other reasons why optimality would not be obtained. On the one hand, the personal income tax treatment of employer-provided insurance leads to overinsurance; on the other, employee turnover leads to under-insurance. See Pauly, "Taxation," pp. 629-675, and Rashi Fein, *Alcoholism in America: The Price We Pay*, Comp Care Pubs., Minneapolis, Minn., 1984.

<sup>18</sup>Pauly, "Taxation," pp. 641-643, and the references cited therein.

<sup>19</sup>John Wakeman-Linn, "Coverage Ceilings on Outpatient Mental Health Care: The Patient's Perspective," Department of Economics, Williams College, March 1988.

<sup>20</sup>Most cost-benefit analyses done in the real world are not done properly. Much of the shortfall in quality is unavoidable and appropriate, for it is costly to gather the "ideal" data set. Far more disturbing is the fundamental confusion often evidenced between accounting and social welfare data. Analysts incorrectly restrict attention to those things that can be easily measured (all too often including no more than the prices and quantities bought and sold), substituting a value of zero for their best guess on difficult-to-measure items. The result is a biased and incomplete policy prescription, and the technique as a whole is unfairly castigated by a form of statistical discrimination.

<sup>21</sup>A. Myrick Freeman III provides an excellent introduction to the use of the hedonic technique in his book *The Benefits of Environmental Improvement: Theory and Practice*, Johns Hopkins University Press, Baltimore, Md., 1979. Since then, a voluminous literature refining and critiquing the technique has appeared, but a review of this literature is beyond the scope of the present paper.

<sup>22</sup>The appropriate solution is a matter for further study, as not all variation in crime rates is due to variation in addiction levels. Ideally, one would want to control for that portion of variation in crime rates that is independent of addiction and not control for addiction-caused variations. This could be accomplished with a simultaneous equations structural estimation technique. Alternatively, one could control for crime, estimate an auxiliary equation between drug use and crime rates, and combine estimates to impute the total value of drug control. Although these solutions are reasonably straightforward in simpler statistical models, it might prove difficult to integrate them with the more elaborate techniques sometimes employed in hedonic analysis.

<sup>23</sup>This argument relies on the fact that commuters, shoppers, or tourists are merely passing through the high-addiction community. If the high-addiction community were their final destination, the cost of drug addiction to outsiders would be reflected in local property values. If the workplace were in a high-crime

district, the employer would have to offer higher salaries to attract workers, and this would reduce the value of the land site to employers. Similarly, high crime would reduce the value of a store attracting shoppers or a tourist attraction.

<sup>24</sup>See Ronald G. Cummings, David S. Brookshire, and William D. Schulze, eds., *Valuing Environmental Goods: An Assessment of the Contingent Value Method*, Rowman and Littlefield, Totowa, N.J., 1986.

<sup>25</sup>Heterogeneous prices, such as those generated by a sliding-scale fee system, are considered below.

<sup>26</sup>Some economists would prefer to model the addict's choice of insurance plans (which differ in copayment rates) and of treatment amounts as a simultaneous decision, so that one cannot take  $C$  as given when determining  $Q$ . The problem is a standard one of representing general equilibrium with partial-equilibrium diagrams. Nonetheless, the equilibrium itself can be characterized by this diagram, although interactions between markets affect the locations of the curves. Alternatively, one can assume that insurance does not cover preexisting conditions (and that this restriction can be enforced); consequently, the purchases must be done sequentially. Then, it does make sense to regard  $C$  as given when selecting  $Q$ .

<sup>27</sup>The effect is exactly analogous to a sales tax, but it operates in the opposite direction.

<sup>28</sup>It is implicitly assumed that the copayment rate or the public subsidy rate is the same for every addict. This would not be the case if the public subsidy rate were a sliding scale depending on the income and insurance coverage of the recipient addict. These figures seem ill-suited to analyzing heterogeneous subsidies of this sort, but they can be easily handled in equation form.

<sup>29</sup>It has been assumed that the income elasticity of demand for treatment is small enough to ignore. If not, the inframarginal price subsidy would lead to an increase in demand if treatment were a normal good. It remains true that past the binding cap, the stimulus to demand is smaller than would occur without a cap. Furthermore, unless the income effect were large enough to push the intersection past the discontinuity, the equilibrium quantity would not change.

<sup>30</sup>There is a technical exception to this conclusion of little practical importance. If safety were a sufficiently

inferior good, it is possible that a public safety program would be counterproductive.

<sup>31</sup>Pauly, "Taxation," does this.

<sup>32</sup>Henrick Harwood personal communication, September 1988.

<sup>33</sup>See Pauly, "Taxation," pp. 662-664, for further discussion of endogenous quality.

<sup>34</sup>Comprehensive Care Corporation of Irvine, California, offered free treatments for relapses up to five years after completion of the program (Cynthia Wallace, "Treatment Guarantees to Proliferate Despite Claims that Ads are Misleading," *Modern Healthcare* 17, July 17, 1987, p. 40). The program was discontinued, however, after it was found that cocaine addicts had more relapses than expected.

<sup>35</sup>For example, Randall P. Ellis and Thomas G. McGuire, "Cost Sharing and Patterns of Mental Health Care Utilization," *The Journal of Human Resources* 21, Summer 1986, pp. 359-379.

<sup>36</sup>See Pauly, "Taxation," pp. 660-662, and the references cited therein.

<sup>37</sup>The technique was originally developed in Gary Burtless and Jerry Hausman, "The Effect of Taxation on Labor Supply: Evaluating the Gary Negative Income Tax Experiment," *Journal of Political Economy* 86, 1978, pp. 1103-1130. It was later applied to labor supply in Jerry Hausman, "Labor Supply," in Henry Aaron and Joseph Pechman, eds., *How Taxes Affect Economic Behavior*, The Brookings Institution, Washington, D.C., 1981; to housing in Jerry Hausman and David Wise, "Discontinuous Budget Constraints and Estimation: The Demand for Housing," *Review of Economic Studies* 47, 1989, pp. 75-96; and to charitable donations in William Reece and Kimberly Zieschang, "Consistent Estimation of the Impact of Tax Deductibility on the Level of Charitable Contributions," *Econometrica* 53, March 1985, pp. 271-293.

<sup>38</sup>Martin Feldstein and Lawrence Lindsey, "Simulating Nonlinear Tax Rules and Nonstandard Behavior: An Application to the Tax Treatment of Charitable Contributions," in Martin Feldstein, ed., *Behavioral Simulation Methods in Tax Policy Analysis*, National Bureau of Economic Research, Cambridge, Mass., 1983.

<sup>39</sup>"Should Cocaine Cost More? Less?" (editorial), *New York Times*, July 28, 1988, p. 22.

<sup>40</sup>Mark D. Uehling, "Drug Rehabilitation: The Addict Glut: Public Treatment Centers Lack Beds and Funds," *Newsweek* 108, August 25, 1986, p. 34.

<sup>41</sup>"And Localities Must Fight for Drug Treatment" (editorial), *New York Times*, June 5, 1988.

<sup>42</sup>Uehling, "Drug Rehabilitation."

<sup>43</sup>Henrick Harwood, personal communication, September 1988.

<sup>44</sup>Unpublished data from the National Drug and Alcoholism Treatment Utilization Survey (NDATUS) indicate that insurance payments rose from \$40 million in 1982 to \$350 million in 1987, whereas client fees rose from \$35 million to \$160 million and public third-pay expenditures from \$60 million to \$140 million over the same period (all figures are in nominal dollars).

<sup>45</sup>Ibid.

<sup>46</sup>See the author's unpublished paper, "Econometric Analysis of the Relations Between Government Social Service Expenditures and Private Donations," April 1989, and the references therein.

<sup>47</sup>Henry Hansmann, "The Effect of Tax Exemption and Other Factors on the Market Share of Nonprofit Versus For-Profit Firms," *National Tax Journal* 40, 1987, pp. 71-82.

<sup>48</sup>Henry Hansmann, "The Rationale for Exempting Nonprofit Corporations from the Corporate Income Tax," *Yale Law Journal* 91, 1981, pp. 45-100.

<sup>49</sup>Uehling, "Drug Rehabilitation," referred to the "'not in my backyard' syndrome."

<sup>50</sup>See Julian Wolpert and Michael Dear, "Satellite Mental Health Facilities," *Annals of the Association of American Geographers* 65, 1975, pp. 24-35, and Michael Dear, *Not on Our Street: Community Attitudes to Mental Health Care*, Dion: London, 1982, for a discussion of some of the policy issues involved in siting an "obnoxious" facility.

<sup>51</sup>*New York Times* (editorial), June 5, 1988.

<sup>52</sup>Robert W. Paulson, "People and Garbage are not the Same: Issues in Contracting for Public Mental Health Services," *Community Mental Health Journal* 24, Summer 1988, pp. 91-107.

<sup>53</sup>He noted (p. 96) that "[t]he political economy of human service delivery systems tends to limit competition. Two studies of purchase of service contracting for human services . . . suggest that agencies tend to create a negotiated environment in which each agency in the system stakes out its own territory (domain) and has a monopoly within that market segment. Instead of competition developing, there is a system of market shares resembling a collective oligopoly."

<sup>54</sup>If there are only two or three facilities, it is possible they would collude rather than compete, a problem that is well-known and not completely re-solved. It is clear that the number of existing firms is less important than the ease with which new firms could enter and exit in the event of collusion between existing firms.

<sup>55</sup>Pauly, "Taxation," p. 670.

<sup>56</sup>Alain C. Enthoven, "A New Proposal to Reform the Tax Treatment of Health Insurance," *Health Affairs* 3, 1984, pp. 21-39.

<sup>57</sup>Cited in *Wall Street Journal*, December 28, 1988, p. B1.

<sup>58</sup>Ibid.

<sup>59</sup>Ibid.

<sup>60</sup>Ibid.

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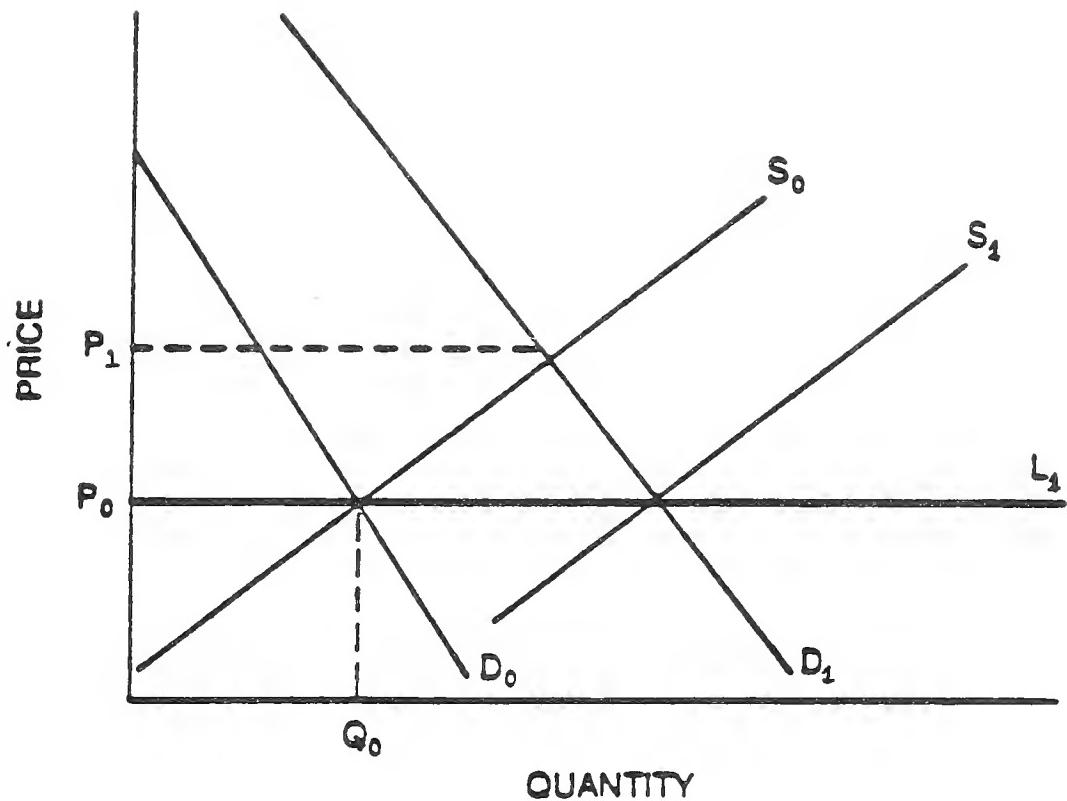


FIGURE 1: Equilibrium in a free market without quantity insurance.

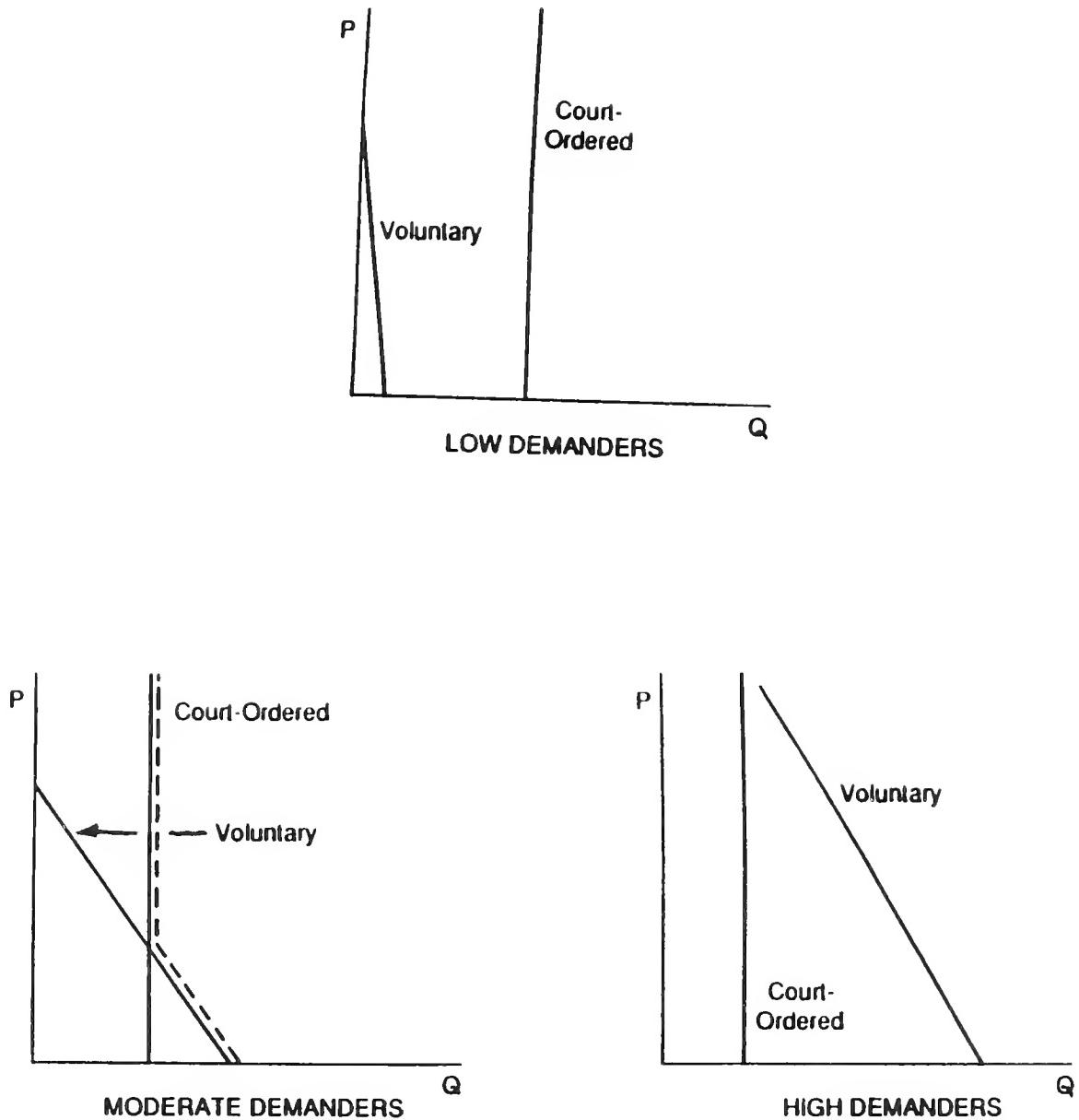


FIGURE 2: Individual demand with court orders.

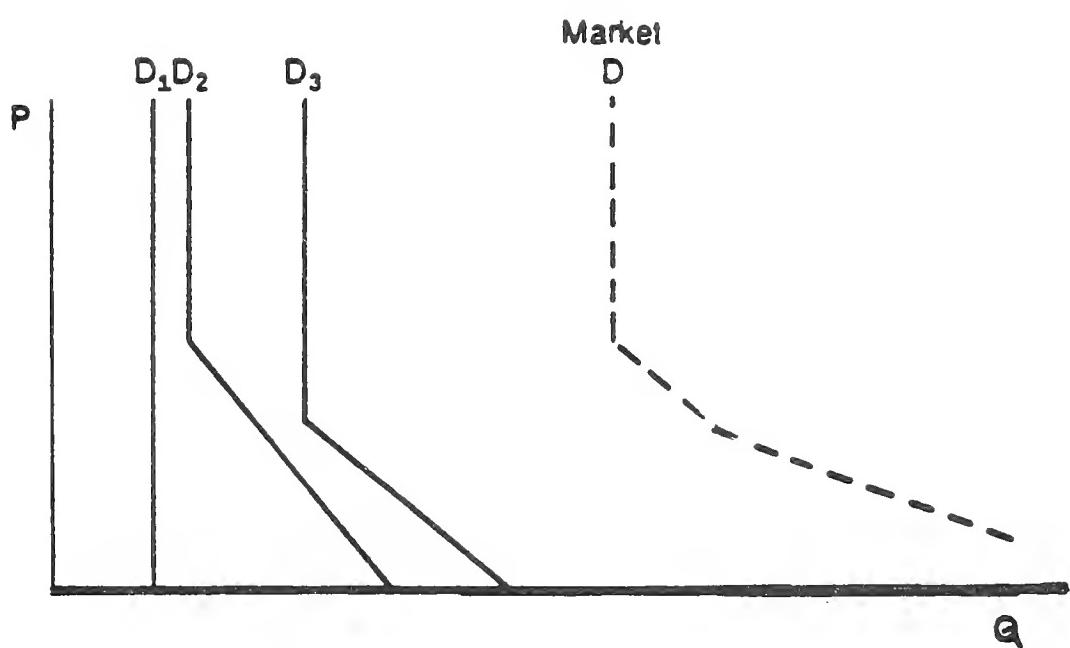


FIGURE 3: Deriving market demand.

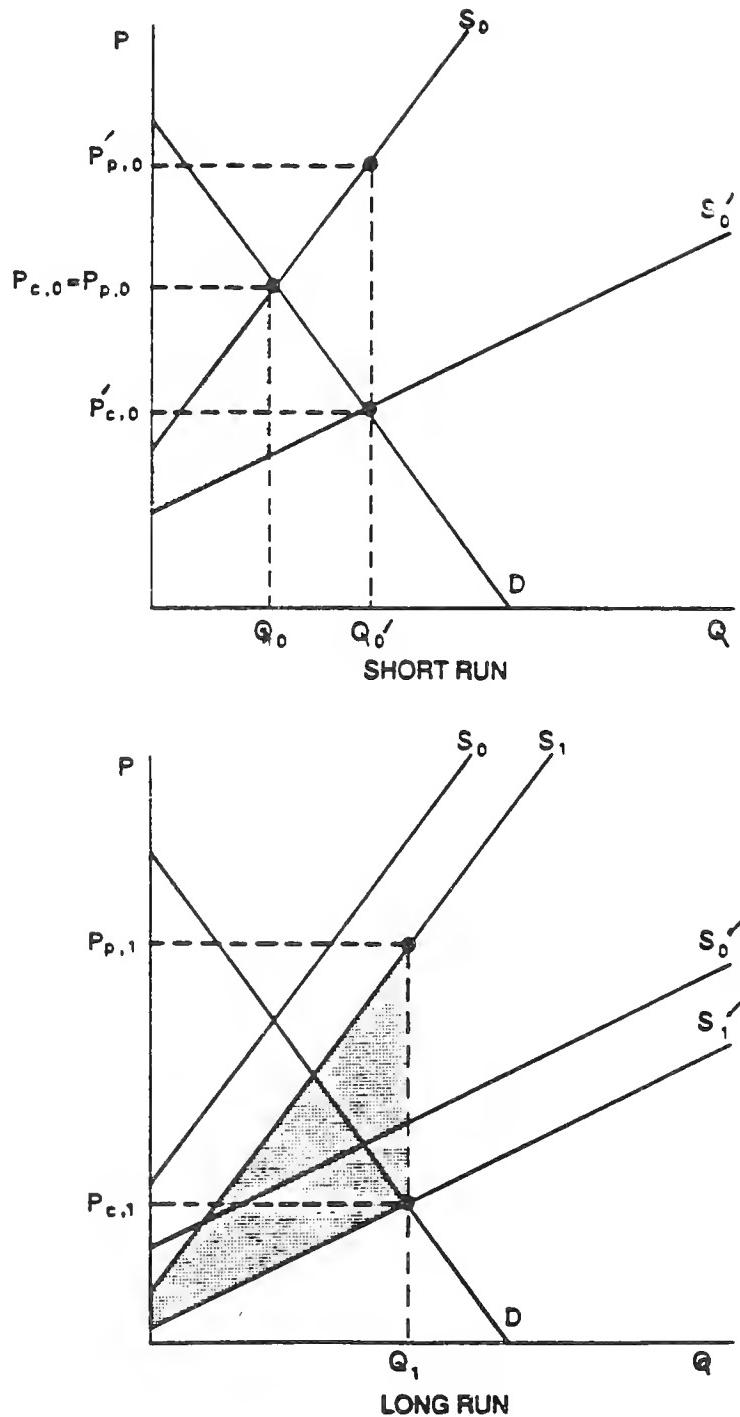


FIGURE 4: Effect of insurance copayment or price subsidies by government on equilibrium.

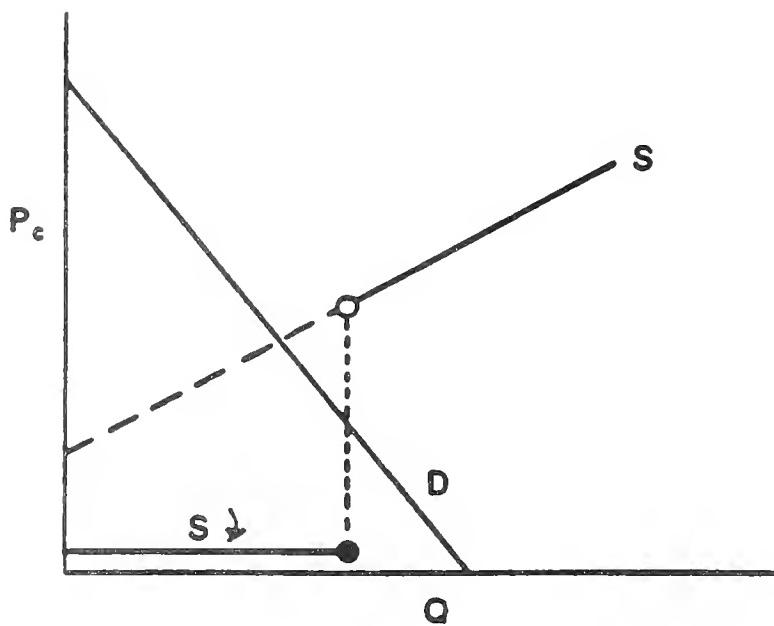
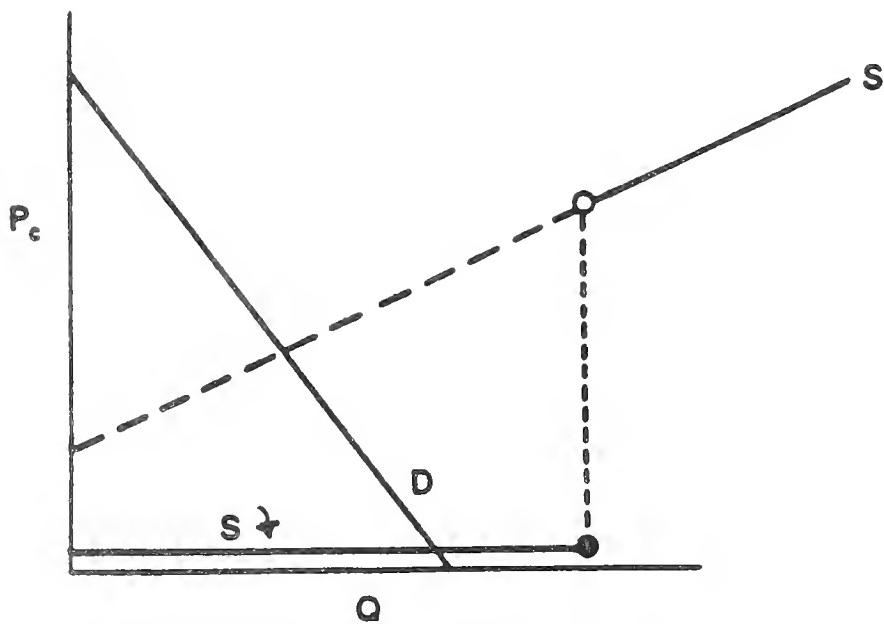


FIGURE 5: Effect of insurance without copayment or totally subsidized public care on equilibrium.

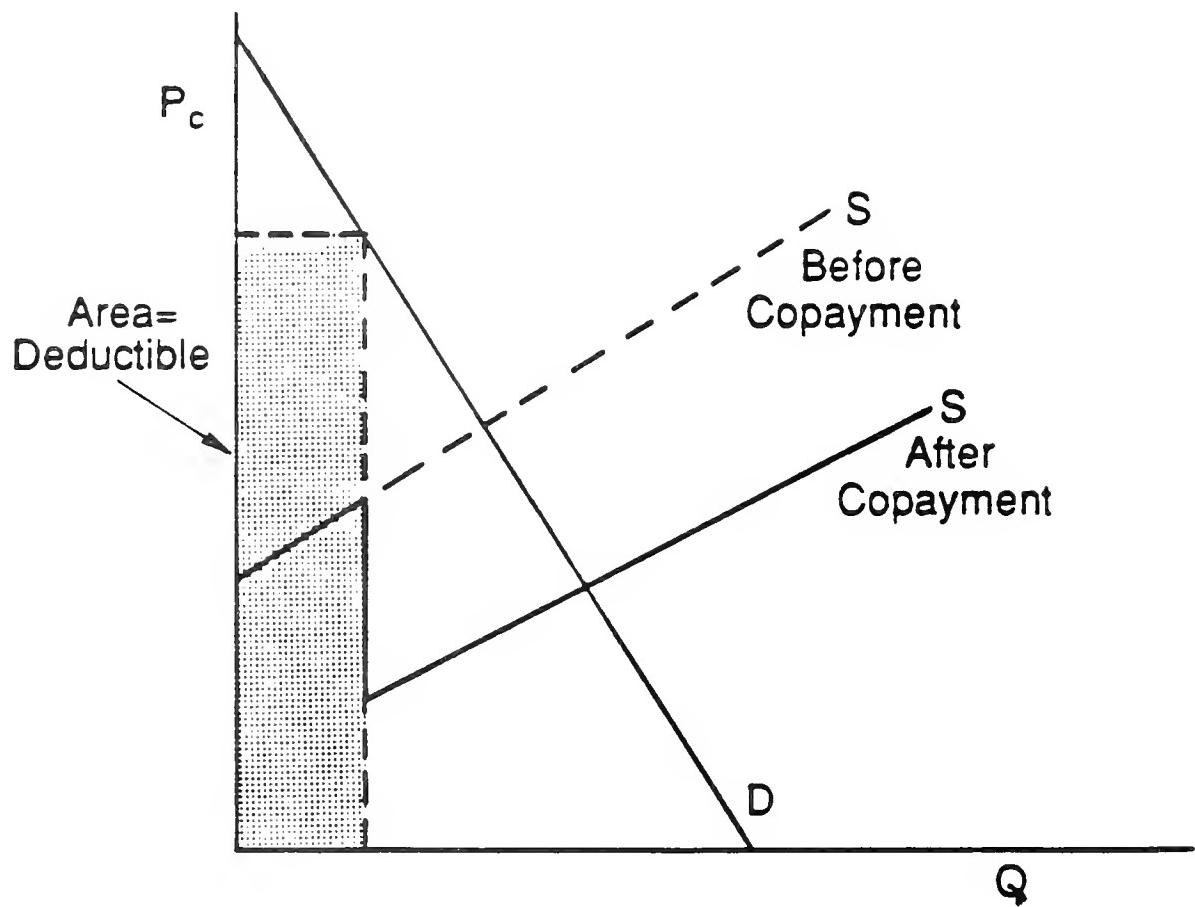


FIGURE 6: Effect of copayment with deductibles.

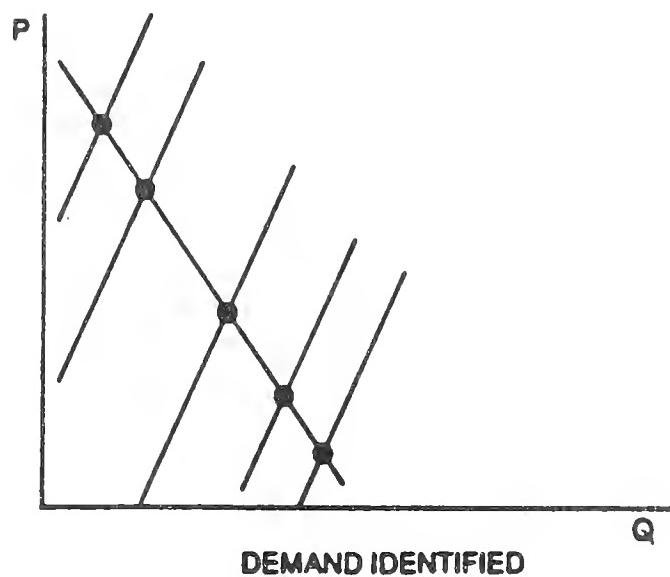
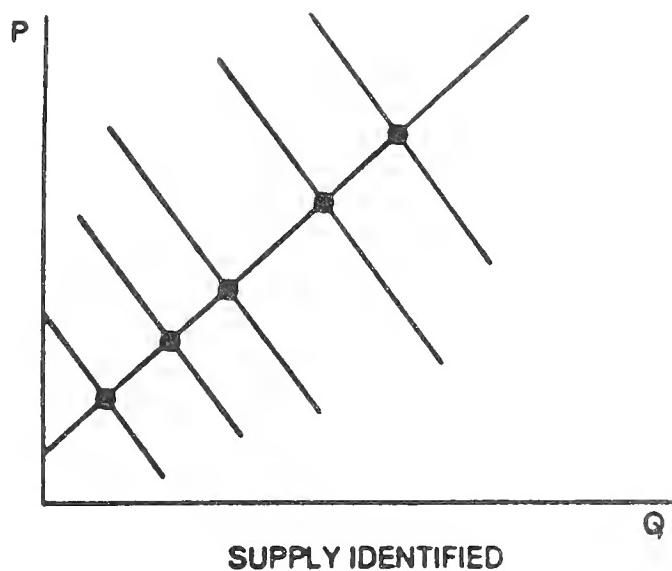


FIGURE 7: Identifying supply and demand from observations of price and quantity.

## REPEATING CYCLES OF COCAINE USE AND ABUSE

Ronald K. Siegel

On October 12, 1860, Abraham Lincoln walked into the Corneau & Diller drug store in Springfield, Illinois, where he regularly purchased such items as bay rum, brandy, and cough candy laced with opium. On that day, Lincoln bought 50 cents worth of a product that a few historians claim contained coca or cocaine,<sup>1</sup> thus becoming possibly the first American to buy this newly available substance (Pratt, 1943:153). Little else is known about Lincoln's pattern of "cocaine" use or its consequences, but the following week he started growing his famous beard and shortly thereafter became president of the United States.

Although Lincoln may not have pursued the use of cocaine, the time of his purchase--five years after the alkaloid was isolated from coca by Gaedecke and one year after Albert Nieman named it "cocaine"--signaled the beginning of a new cycle of coca and cocaine abuse. This cycle was marked by new preparations, doses, and routes of administration. Prior to this time, only coca products had been available, and the patterns of their use had not changed substantially in more than 4,800 years.

### THE FIRST CYCLE: USE (3000 B.C.-1860 A.D.)

Historically, South American natives administered coca orally and topically and ingested it by smoking in low, albeit effective, dosages. When used orally, the leaves were chewed, sucked, and swallowed. Studies involving contemporary coca chewers suggest that this pattern of administration results in an average daily ingestion of 200 to 500 milligrams (mg) of cocaine with plasma cocaine levels similar to those achieved from intra-nasal

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administration (Holmstedt et al., 1979; Paly et al., 1980). Quids of partially chewed leaves were used as topical local anesthetics for trephining operations (Hrdlicka, 1939) and to relieve posttrephining distress (Moodie, 1923). The juice of chewed leaves is still used to treat eye and throat irritations (Grinspoon and Bakalar, 1976), and the dosages necessary for effective local anesthesia could be as low as just a few milligrams (Martindale, 1982). The sacrificial burning and smoking of coca leaves and seeds in magico-religious practices, as well as for the relief of upper respiratory problems, probably delivered less than 25 mg of cocaine (Siegel, 1982).

There is little evidence that these patterns and dosages were associated with abuse or toxicity. However, because coca use was considered a habit connected with idolatrous Indians of poor health, it was continually condemned starting in 1567 (Mortimer, 1901). This view of coca as "wicked" and with "no true virtue" was expressed throughout the first cycle and set the stage for future treatment of the habit to include religious and moral education.

### THE SECOND CYCLE: ABUSE (1860-1914)

Coca was introduced to Europe by the reports of sixteenth-century explorers, seventeenth-century chroniclers, eighteenth-century naturalists, and nineteenth-century botanists (Mortimer, 1901). After Mantegazza's 1857 and 1859 essays on the virtues of coca, medical and nonmedical coca products appeared, and European use initially followed the same low-dose patterns observed in South America. The first coca wines and tonics were introduced in France in the 1860s and eventually were advertised throughout the rest of the world. These promotions, lacking medical or

scientific support, encouraged frequent use of escalating doses, a pattern that inevitably led to a new cycle of cocaine abuse. Recent analysis of these preparations reveals that changing dose regimens were inextricably tied to this abuse (Siegel, 1985a).

An analysis of representative pharmaceutical bottles and formulas in the author's collection reveals that these tonics and extracts contained approximately 3 to 160 mg of cocaine per dosage unit. The coca wines and related alcoholic beverages contained approximately 35 to 70 mg of cocaine per dosage unit (glass). Some, like Vin Mariani, were concentrations of 2 ounces of leaves in 18-ounce bottles of wine. The coca leaves themselves were not standardized for cocaine content and may have varied from less than 0.01 percent to 1.5 percent cocaine (Hanna, 1970; Novak et al., 1984; Plowman and Rivier, 1983; Rivier, 1981). The leaves used in manufacturing wines and tonics averaged 0.65 percent, a concentration remarkably similar to assays of contemporary cultivated coca leaves (Coca wines, 1886; Plowman and Rivier, 1983; Rusby, 1888). Mariani's Elixir was three times more concentrated than the wine, and his coca tea was eight times more concentrated (Mariani, 1888, 1892). Nonetheless, recommended doses of these preparations would have resulted in daily ingestion of little more than 450 mg of cocaine. Most wines available in the 1890s contained approximately 10 mg of cocaine per fluid ounce, and recommended doses were from one-half a wine glass (2 ounces, or 20 mg) to a full wine glass (4 ounces, or 40 mg) per administration (Coca wines, 1886). French Wine Coca, the original name for Coca-Cola, was an imitation of these French coca wines and reportedly contained less than one-half ounce of coca leaves per gallon.<sup>2</sup>

Initially, physicians, pharmacists, and chemists recommended a pattern of use for drinking coca products that would have resulted in less daily intake of cocaine than from chewing the leaves but with the same stimulating properties. For example, in the first commercial book advertising coca and its products,<sup>3</sup> Chevrier (1868) claimed a

wide variety of therapeutic applications for coca preparations that were equal to the chewed leaves but did not have to be used as often. Indeed, most coca fluid extracts and wines, the most popular preparations recommended by physicians (Mortimer, 1901), were formulated on the basis of their equivalence in leaves.

The second book on the subject, *Erythroxylon Coca: A Treatise on Brain Exhaustion as the Cause of Disease*, by British physician William Tibbles (1877), recommended the use of coca for a variety of physical and mental diseases. The third book, *La Coca du Perou*, was the first in a long series of publications by chemist Angelo Mariani (1878) that expanded on the therapeutic applications of his commercial line of coca products. The fourth book, published by New York physician W.S. Searle (1881), endorsed the medical use of coca for all problems of life and as an alternative to tobacco, tea, coffee, and wine. The coca dosage regimens recommended by Tibbles, Searle, and their colleagues would have resulted in daily ingestion of no more than 65 to 160 mg of cocaine. Coca-Cola, promoted as a "Brain Tonic" for exhaustion, went through several changes in its formula (Louis and Yazijian, 1980) and from the 1890s to 1903 contained approximately 60 mg of cocaine per 8-ounce serving.<sup>4</sup> By the time the fifth book on coca was published (Thudichum, 1885), it was an accepted medical fact that coca, and its alkaloid cocaine, had the power to relieve suffering.

Concomitant with the growing number of new coca products on the market, advertisements promoted their use for a wide variety of nonmedical purposes. However, cocaine itself was widely available at this time, and the dosage regimens recommended for use of cocaine products by Tibbles, Merck (1885), and Martindale (1886) would have resulted in daily ingestion of as much as 810 to 1,620 mg of cocaine, or approximately three times the cocaine intake of the coca chewer. Indeed, whereas coca products and dosages were treated as roughly equivalent to the chewing of coca leaves, cocaine was advertised as 200 times stronger than coca, 1 grain of cocaine being the

equivalent of 200 grains of coca leaves (Hammond, 1887).

Yet little adjustment was made for this dose consideration. In fact, the convenience of cocaine prompted even the most conservative of physicians to apply its use to virtually all medical and nonmedical complaints. Using the typical medical hyperbole of the times, Tibbles promoted a cocaine "Child Restorer" as a universal remedy for diseases of children, a "Brain Feeder" in all cases where an individual desired more energy, and a "Compound Essence of Cocaine" for all remaining problems of life.

Cocaine became available in a wide variety of base and salt preparations, some in combination with other agents including agonists like atropine and physostigmine and narcotic-analgesics like morphine. The increased use of cocaine was further complicated by the increasing popularity of the highly efficient intranasal and injection routes of administration. Inhalant and intranasal doses of 65 mg were commonly used, and injection doses as high as 32 to 1,200 mg were employed. Some asthma and hay fever snuffs were pure cocaine, and users were instructed to take them as needed (Ashley, 1975). Recommended doses through smoking of coca cigarettes and cigars could have been as high as 225 mg per day (Parke, Davis & Co., 1885). By 1894 cocaine was being used topically on the penis as well as rectally and vaginally (Martindale, 1894).

It is not surprising that the widespread availability of cocaine marked the decline of coca as a medicine. But the parallel increases in cocaine dosages, routes of administration, and medical and nonmedical abuses just as quickly arrested cocaine's development as a therapeutic agent. Daily dosages of cocaine "addicts" sometimes reached more than 12 grams (Meyers, 1902), doses almost impossible to achieve with coca products and ones that would not be seen again until the discovery of smoking cocaine free base in the 1970s.

As the nonmedical use of cocaine and other narcotics escalated, state legislatures and Congress increased restrictions and penalties. The significant federal legislation included the Food and Drug Act (1906), the Harrison Narcotics Act (1914), the Narcotic Drug Import and Export Act (1922), the Uniform Narcotic Act (1932), and the Narcotics Drug Control Act (1956). Consequently, the growth in use and abuse was slowed significantly but persisted in underground populations supplied by a new black market. Indeed, by the middle of the 1920s, the underground traffic in narcotics equaled the legitimate medical traffic, and "dope peddlers" appeared to have established national as well as international organizations for smuggling the drugs by land and sea. Concomitantly, the behavior and health problems of users, already changing for the worse before restrictive legislation was enacted, were exacerbated by the new laws (Courtwright, 1982).

These legislative acts, coupled with the Depression and the subsequent introduction of amphetamines in 1932, contributed to the low plateau of cocaine use until the late 1960s. Amphetamines initially were legal, abundantly available, and cheap. The cycle of widespread cocaine use would not resurface until changes in medical practices (e.g., the Drug Abuse Control Amendments of 1965), legislation (e.g., the Controlled Substances Act of 1970), and a strong educational campaign (e.g., "Speed Kills") effectively stopped the widespread use of amphetamines. Soon after, the subsequent third cycle of cocaine use was born.

### Treatment in the Second Cycle

The initial paucity of adverse reactions to coca and cocaine prompted early clinicians to deny the existence of genuine medical problems. They suggested that people decide for themselves if they must abstain or not (cf. Beard, 1871). An 1897 survey of 396 physicians uncovered only 14 cases of a coca habit per se (Mortimer, 1901:491-516). Once cocaine dependence was recognized,

physicians began treatment of the withdrawal symptoms with alcohol and morphine (Erlenmeyer, 1889). As the number of abusers seeking medical help grew, so did the list of treatments. Many treatments emphasized religious and moral lectures to ensure abstinence (e.g., Bunting, 1888). But most cocaine users treated themselves with "home cures"--patent medicines taken at home. These "home cures" were gradually replaced by "sanitarium cures," which employed long periods of hospitalization. By the end of the second cycle, clinics, cures, and sanitaria were blossoming throughout the United States. Only a few clinicians really understood the addicting nature of cocaine and attempted to teach patients how to avoid conditions conducive to cocaine use (e.g., Crothers, 1902). Most treatment programs simply demanded longer and longer periods of hospitalization (e.g., Lewin, 1924). Despite the growth of all such treatment services, however, there was no appreciable change in recovery rates.

### THE THIRD CYCLE: USE (1970-1978)

The first contemporary book on cocaine appeared in 1972 (Chasin, 1972) and marked a resurgence in nonmedical cocaine use. The book noted that 90 percent of users preferred intranasal administration, a pattern of use illustrated in several motion pictures released that same year (*Go Ask Alice*, *Dealing*, *Super Fly*, and *The Discreet Charm of the Bourgeoisie*). In those movies, cocaine use was portrayed as discreet, involving small intranasal hits from spoons or straws; charming, in terms of the perception users had of their use; and bourgeois, finding its way into middle-class lives. These patterns were not inventions of screenwriters but simply reflections of contemporary models of use (Starks, 1982).

The cocaine paraphernalia industry was also developing (Wynne, et al. 1980), and spoons and straws for intranasal cocaine use became popular. Siegel (1977) determined that the average cocaine spoon available at that time delivered 5 to 10 mg of pure cocaine. The average amount of cocaine

delivered through a straw from a "line" was 25 mg. Because two cocaine spoons or two lines (one for each nostril) were used, each administration consisted of 20 to 50 mg.

Various patterns of use ranging from experimental use of a few "lines" or "hits" of cocaine to daily compulsive use of 4 grams appeared during the period 1970-1978 (Siegel, 1984a). Five patterns of nonmedical cocaine use have been defined by Siegel (1977), and these will be used for discussion here.

1. *Experimental Use*--Siegel's article defined experimental use as short-term, nonpatterned trials of cocaine with varying intensity and with a maximum lifetime frequency of 10 times (or a total intake of less than 1 gram). These users were primarily motivated by curiosity about cocaine and a desire to experience the anticipated drug effects of euphoria, stimulation, and enhanced sexual motivation. Experimental use was generally social and among close friends but did not continue for a multitude of reasons including economic and supply considerations, disappointment with the intensity and duration of the drug effect, and fear of legal penalties, among others.
2. *Social-Recreational Use*--The most common pattern Siegel found was a social-recreational one in which use generally occurred in social settings among friends or acquaintances who wished to share an experience perceived by them as acceptable and pleasurable. Such use was primarily motivated by social factors and did not tend to escalate to more individually oriented patterns of use. Use tended to occur in weekly or biweekly episodes and continued primarily for three reasons: (1) cocaine was viewed as a social drug that facilitated social behavior; (2) cocaine was viewed as "ideal" and "safe" in terms of convenience of use and its minimal bulk, rapid onset, minimal

duration, and few side and after effects; and (3) cocaine was seen as appealing in terms of sociocultural images.

3. *Circumstantial-Situational Use--* Circumstantial-situational use was defined as a task-specific, self-limited use that was variably patterned and differing in frequency, intensity, and duration. This use was motivated by a perceived need or desire to achieve a known and anticipated drug effect deemed desirable in coping with a specific condition or situation. Use tended to occur in four or five episodes per week. Motivations cited by users included the enhancement of performance or mood at work and play.
4. *Intensified Use--* Intensified use was defined as long-term patterned use at least once a day. Such use was motivated chiefly by a perceived need to achieve relief from a persistent problem or stressful situation or a desire to maintain a certain self-prescribed level of performance.
5. *Compulsive Use--* Compulsive use was defined as high-frequency and high-intensity levels of relatively long duration, producing some degree of psychological dependency. The dependence is such that the individual user does not discontinue such use without experiencing physiological discomfort or psychological disruption. Compulsive patterns are usually associated with preoccupation with cocaine-seeking and cocaine-using behavior to the relative exclusion of other behaviors. The motivation to continue compulsive levels of use was primarily related to a need to elicit the euphoria and stimulation of cocaine in the wake of increasing tolerance and incipient withdrawal-like effects.

#### The Social-Recreational User: 1970-1978

The most common pattern of cocaine use during the contemporary period 1970-1978 was the

social-recreational pattern. The average social-recreational user studied by Siegel (1977) used 1 to 4 grams of cocaine per month. However, doses were not evenly distributed over time. Users generally purchased cocaine in half-gram or gram quantities, and most consumed it within two to seven days. During days of use, users averaged daily intakes of 150 mg.

In 1974, a group of 99 such social-recreational users were recruited for a longitudinal study (Siegel 1977, 1980b, 1984a). These users were selected through advertisements distributed to several million households by Los Angeles newspapers. Although the sample represented a specific geographical population, the users appeared highly similar to those sampled by smaller studies elsewhere (Grinspoon and Bakalar, 1976; Resnick and Schuyten-Resnick, 1976). In addition, although only 50 of these users (50 percent) continued through the 9 years of the study (and only 16 were found for a 14-year follow-up interview in 1988), their changing patterns and effects were similar to those found during this period in both short-term and longitudinal studies involving other users (Ashley, 1975; Erickson et al., 1987; Spotts and Shontz, 1976, 1980). Indeed, Spotts and Shontz, (1980) have claimed that the intensive study of even a small number of representative cases is a powerful tool in studying drug abuse. The subjects in this study also represent the only cocaine users that have been intensively studied for more than a decade, a decade that marked significant changes in patterns of cocaine use in America (Adams et al., 1986).

Although patterns of use changed considerably over the 14 years of the study, initial use during its first 4 years (1975-1978) appeared relatively stable. During that period all of the subjects remained social-recreational users, but 75 percent engaged in episodes of more frequent use. These latter episodes included circumstantial-situational and intensified patterns, but always the subjects returned to social-recreational use as their primary pattern. None of the users engaged in compulsive use during this period.

However, most social-recreational users also manifested a potentially toxic pattern of use that can be called "binge" use. Binge use, also known as "runs," refers to continuous periods of repeated dosing, usually at least once every 15 to 30 minutes, during which users consume substantial amounts of cocaine. During binges, users may assume some of the behavioral characteristics of compulsive users. Binge use appears to be motivated by a desire to maximize positive drug effects. Although binging can be found within all groups of cocaine users, social-recreational users did not tend to binge during the period 1975-1978. When engaged in episodes of intensified use, 17 users reported binges that involved intake of an average of 0.5 grams (range, 0.25-1.25 grams) in runs averaging four hours (range, 1-18 hours).

Nonetheless, for a proportion of users the social-recreational patterns appeared relatively stable. Several variables, including the following, contributed to this stability. First, the purity of street cocaine remained relatively the same during this period with an average of 53 percent (range, 43.2-60.8 percent). Second, these users continued to purchase cocaine in half-gram or gram quantities for prices that averaged \$75 to \$100 per gram. Third, the size and nature of cocaine spoons and other paraphernalia remained relatively the same. Fourth, the intranasal route remained the most common. Users experiencing nasal problems practiced various methods of nasal hygiene described by consumer handbooks with the aid of nasal douches and other devices offered by the paraphernalia industry. Fifth, the misperception of intranasal cocaine as a "relatively safe and ideal social-recreational drug" was common among users (Siegel, 1977). Finally, physical and psychological problems were rarely encountered by social users, and treatment of cocaine effects with combinations of other drugs such as diazepam or methaqualone was reported by only 4 percent of these users.

#### Treatment in the Third Cycle

Because the social-recreational patterns of cocaine use during this cycle resulted in relatively few

users seeking clinical attention, researchers and clinicians alike minimized the dangers of cocaine. Most efforts focused on treatment of acute toxic reactions in emergency rooms (Siegel, 1985b). However, by the end of this cycle the long-term effects were emerging, thus prompting more users to seek clinical attention. The treatment services that were available were generally unfamiliar with cocaine problems and, not surprisingly, reported little success.

### THE FOURTH CYCLE: ABUSE

#### 1978-1988

The patterns of use among continuing users began to change between 1978 and 1988 (Siegel 1982, 1984a, 1985a). As dosages increased, a new cycle of abuse became inevitable.

#### 1978-1982

The users in Siegel's longitudinal study averaged between 1 and 3 grams per week from 1978 through 1982 (Siegel, 1984a). Fifty percent ( $N = 25$ ) of the users still in the study ( $N = 50$ ) in 1983 remained social-recreational (with continuing episodes of increased use) whereas 32 percent ( $N = 16$ ) of the users became primarily circumstantial-situational users, 8 percent ( $N = 4$ ) became intensified users, and 10 percent ( $N = 5$ ) became compulsive users.

Dosages varied with the pattern of use. The social-recreational users averaged approximately 1 gram per week, circumstantial-situational users averaged 2 grams per week, and intensified users averaged 3 grams per week. Most users engaged in some binge use characterized by the same doses and durations observed during the period 1975-1978.

Perhaps the most dramatic change was seen in the compulsive pattern of use. Compulsive intranasal use has been described in other studies (Ashley, 1975; Resnick and Schuyten-Resnick, 1976); however, compulsive users here were all smokers

of cocaine free base. It should be noted that in other studies the proportion of cocaine smokers doubled between 1983 and 1986 (Johnston et al., 1987). Siegel's cocaine smokers averaged 1.5 grams per day (range, 1 to 30 grams). The nature and consequences of this pattern of use have been discussed elsewhere (Siegel, 1982). Most if not all compulsive use here occurred in binges involving intakes of 1.5 grams (range, 0.25 to 30.0 grams) in a 24-hour period (range, 1 to 96 hours).

Taken together, 1978 through 1982 marked an escalation in dosages and dose regimens for these social-recreational users. Changes in several variables were associated with this change in pattern of use. First, the purity of street cocaine declined during this period to an average of 29.2 percent (range, 13.9 to 48.7 percent). Second, users tended to purchase cocaine in full gram or one-eighth ounce (3.5 gram) quantities, and the half-gram unit became increasing scarce. Third, the paraphernalia industry introduced a variety of cocaine-dispensing devices, known collectively as "bullets," which delivered an average hit of 25 mg (range, 15 to 50 mg), more than twice the hit from a cocaine spoon. The average size of commercial cocaine spoons themselves actually got smaller (average, 8.3 mg; range, 5.0 to 24.1 mg). The paraphernalia industry also introduced a wide variety of cocaine smoking kits and accessories (Siegel, 1982). Fourth, the smoking route became a preferred route of administration for many new users. Fifth, the perception of intranasal cocaine as a relatively safe pattern of drug use continued in the face of increasing negative publicity concerning cocaine smoking (Siegel, 1982). And finally, users increased multiple drug use in their self-treatment of cocaine-related problems. Fully 30 percent of Siegel's respondents were using methaqualone, and 13 percent were using diazepam.

#### 1982-1984

During the period 1982 to 1984 there were dramatic increases in physical and psychological problems associated with cocaine dependency and toxicity (see Siegel, 1984a). Several studies noted

that both intranasal users and cocaine smokers tended to binge more often. Lower street prices and ubiquitous supplies allowed some users to consume an entire week's supply of cocaine during a single episode of use ranging from several hours to several days. Continuing users in Siegel's longitudinal study still averaged 1 to 3 grams during these binges, but other users interviewed by the author reported using between 0.5 and 7.0 grams during binges.

In addition to more concentrated dose regimens, dosages themselves became more concentrated. The average purity of street cocaine during 1982-1984 for these users was determined to be 73.3 percent (range, 58 to 87 percent). This change was undoubtedly influenced by worldwide increases in coca and cocaine production coupled with decreased availability of cocaine substitutes, adulterants, and diluents owing to paraphernalia legislation (Drug paraphernalia litigation, 1984; Smith, 1982). Concomitantly, the street price dropped to pre-1977 levels of \$60 to \$100 per gram, with an average price of \$85 per gram. The decreased availability of paraphernalia also prevented the precise control over individual doses afforded by the cocaine spoons and dispensers, and this often resulted in toxic overdoses.

Many users reported purchasing quantities of cocaine for use during specific episodes or binges that would terminate only when supplies were exhausted. In Los Angeles, young users (12 to 17 years of age) reported the availability of small quantities for purchase at clubs and schools. These quantities included single doses selling for \$10 and one-eighth grams selling for \$25.

The decline of the paraphernalia industry during this period resulted in a shortage of cocaine smoking accessories. Thus, the most common method of preparing cocaine free base became the baking soda method (Siegel, 1982) whereby the need for special chemicals and glassware was eliminated. The reduced supply of cocaine pipes resulted in an increase in smoking cocaine free base in combination with tobacco.

By the end of 1984 users reported experimenting with a wide variety of new routes and patterns of cocaine use. These included use of cocaine hydrochloride vaginally, rectally, and sublingually. A few users employed the intranasal route of administration for cocaine free base, and some experimented with smoking coca paste (Siegel, 1985a). An important caveat is that these methods appeared in only a few communities along the cocaine trafficking corridors, and the number of users was relatively small. However, it is also important to note that more widespread practices, like the smoking of cocaine free base, were initially introduced by a small number of users in these same communities.

### **1985-1988**

#### **Crack**

The year 1985 began with the introduction of the word "crack" into the vocabulary of American drug use (Washton et al., 1986a,b). The word first appeared in New York City where it referred to tiny smokable pellets of cocaine freebase. When heated in a pipe, these chunks frequently emitted an audible "crack" sound. Although this form of cocaine had been used elsewhere in the United States since 1974 (Siegel, 1982) and was known by such terms as "rock" or "base," crack marked a new strategy in the sale and marketing of cocaine for smoking. Prior to this time, most cocaine smokers prepared their own cocaine free base from purchased supplies of cocaine hydrochloride. Users had to make their own rock or base, a time-consuming process that necessitated sizable quantities of cocaine. Crack, however, was ready-made in single doses and could be smoked immediately without any further processing. The significance of this shift in cocaine vending patterns stems from the fact that it made the practice of smoking cocaine free base more readily accessible to potential users. Furthermore, because crack was typically dispensed in small vials containing only one or two pellets, each weighing only 100 mg, users were

forced to maintain high rates of purchase in order to maintain their daily dose regimens.

Crack was generally prepared from cocaine hydrochloride using a baking soda extraction method that did not remove the adulterants, diluents, or baking soda usually removed by other methods of preparing cocaine free base (Hisayasu et al., 1982). Consequently, the average purity of crack samples assayed during the period 1985-1988 was only 50 percent, making it far less potent than most other forms of cocaine, and crack users tended to ingest less cocaine per unit dose than other cocaine smokers. Although there were isolated reports of physical and psychological problems related to crack use (e.g., Allen, 1987; Honer et al., 1987; Kissner et al., 1987; Levine, 1987; Smart, 1988), the more severe psychopathology was more commonly associated with the chronic, high-dose regimens of the traditional cocaine free base smoker (e.g., Arif, 1987; Manschreck et al., 1988; Siegel, 1982, 1984c). Crack use, however, was directly linked with epidemic increases in criminal activity related to the distribution and sales of the drug (e.g., Roehrich and Gold, 1988).

#### **The War on Drugs**

As cocaine use was becoming more commonly associated with lower class crack users and crime, the tactics of the government's war on drugs were also changing. The war was formally declared by President Nixon in 1971, President Ford in 1976, and President Reagan in 1982. Its major strategy was aimed at cutting off the supplies of drugs while reducing demand. Supplies of coca, coca paste, and cocaine were attacked in foreign countries at the same time domestic enforcement began attacking supplies utilizing such diverse agencies as the FBI, the Drug Enforcement Administration, and the Marshals Service. A total of 11 cabinet departments, 13 independent agencies, 9 executive branch offices, and 95 subagencies joined the fight. The domestic efforts were backed by new legislation. Laws were passed to enhance penalties, control new drugs,

require forfeiture of cash and drug-related assets, tighten bail requirements, increase reporting for currency and foreign exchange transactions, and provide massive amounts of financial aid.

By 1985 the war effort was effectively suppressing the image of cocaine as an acceptable recreational drug. As a result of these events, the image of cocaine changed from an ideal drug for the privileged to a drug associated with toxicity, dependency, criminal behavior, and street-corner crack dealers in America's inner cities. These changing images of cocaine use were increasingly reflected in movies, television programs, and drug education messages (Siegel, 1984b).

One of the most conspicuous responses to the war on drugs has been a rise in outlaw behavior among cocaine dealers. During the 1960s, marijuana smugglers frequently viewed themselves as revolutionaries protesting an unjust war on drugs. They claimed that every joint smuggled across the border was a bullet for this revolution. This spirit was celebrated in numerous books and magazines such as *High Times*, which emphasized the thrill and adventure of smuggling. Throughout the 1970s, the heroes of cocaine smuggling and dealing were similarly portrayed in popular books such as *Snowblind* (Sabbag, 1976) as well as in the alternative press. From the rebellious cocaine-dealing youth of the film *Easy Rider* (1969) to a prominent actor portraying a senior citizen cocaine dealer in *Atlantic City* (1981), the cocaine outlaw, like the marijuana outlaw, became part of the American lifestyle. During the 1980s, the fictional cocaine outlaws frequently lost their battles in television episodes of "Miami Vice" or in the movies (e.g., *Scarface* in 1984). But many real cocaine dealers armed themselves for the war with automatic weapons, ruthless tactics, and even detailed instruction manuals (e.g., Feral, 1984) on a new form of violence: narcoterrorism.

The rise in outlaw behavior was paralleled by a proliferation in the number and quality of criminal lawyers specializing in cocaine cases. A library of handbooks and other materials (e.g., Gentile, 1979; Siegel, 1983) also appeared to help this

growing cadre of attorneys with legal and technical defense issues related to cocaine.

### Responses of Cocaine Users

The war on drugs created a very real paranoia that filtered down to users themselves. Unlike the psychotic cocaine user who armed himself against imaginary enemies, even healthy social-recreational users began arming themselves and adopting other habits of the cocaine outlaws to survive the battle grounds where cocaine was purchased.

Some cocaine users attempted to evade the pressures from the war on drugs by seeking new supplies. Just as marijuana users had responded to supply problems with the development of domestic cultivation (which now supplies at least 20 percent of American marijuana users) a few cocaine users began to grow coca. Contrary to widespread beliefs, coca grows in North American climates, and the technology and seeds were available to users in the United States as early as 1977 (Manuel, 1977). Users started growing coca for personal use in greenhouses and window boxes, a level of cultivation similar to the novelty gardening of marijuana during the 1960s. The methods for large-scale commercial coca farming, extraction of coca paste, and refinement of cocaine hydrochloride soon followed. Outdoor coca fields were found in Florida, Hawaii, and Puerto Rico whereas indoor commercial coca farms and cocaine production facilities were discovered by law enforcement agencies in Colorado and California (Siegel, 1985c).

In addition, there has been an increase in raids on illegal domestic laboratories synthesizing cocaine throughout the United States. Although handbooks for the manufacture of synthetic cocaine have been available for more than a decade (Darth, 1977; Smith, 1981), production has been limited because of abundant supplies of imported cocaine. However, if supply reduction and interdiction efforts against foreign cocaine become more successful, more domestic coca farms and labs may prosper.

Perhaps the most noticeable change brought about by the war on drugs was that the cocaine user became less public and visible. As the media and law enforcement focused more on the criminal aspects of cocaine, with particular attention on traffickers and dealers (e.g., Eddy et al., 1988), less attention was given to use itself. Users interviewed by the author during this period reported that they actively avoided cocaine parties, shooting galleries, and base houses at which the risks of exposure, arrest, and violent crime were high. Rather, they tended to embrace more individually oriented patterns of use. Consequently, the more common social-recreational patterns of use were in danger of being replaced by intensified and compulsive patterns.

Concomitantly, new users experimented with more efficient methods of use (e.g., smoking ready-made crack), longer lasting preparations such as intranasal cocaine free base (Siegel, 1985a), and cheaper and longer lasting substitute drugs such as methamphetamine. A study of cocaine use among young adults during the early part of this period (Newcomb and Bentler, 1986) revealed that even adolescent cocaine users engaged in greater use of other drugs than those who did not use cocaine. (For example, more than 44 percent of young cocaine users also used amphetamines or other stimulants, compared with 3 percent of nonusers of cocaine.)

### **Changes in Use During the Fourth Cycle**

In an effort to assess the frequency and dosages of cocaine use during this period, several hundred users, representing different populations and varying patterns of use, were evaluated with a new toxicological test: radioimmunoassay of hair samples (Baumgartner et al., 1982, 1989).<sup>5</sup> This method, known as radioimmunoassay hair (RIAH), enabled confirmation of self-reported drug histories. Indeed, the RIAH test has proven useful in the diagnosis and treatment of substance abuse in both psychiatric and criminal justice populations (Sramek et al., 1985; Baumgartner et al., 1989).

Key findings are summarized below for subjects in each population sampled.

### **Long-Term Users**

A total of 16 subjects from Siegel's original longitudinal study were contacted and reexamined in 1988 for purposes of this report. Although this represents a relatively high rate of attrition, it is important to recognize that the subjects in this longitudinal study were the first to manifest patterns of cocaine smoking in the United States, and their continued study enabled the prediction of the present epidemic of cocaine smoking. In addition, these users were among the first to display other new fashions in cocaine use including coca paste smoking and intranasal use of cocaine free base. Most importantly, a 1988 reexamination might show how the war on drugs and other events during the fourth cycle affected preexisting patterns of use. The key RIAH findings are summarized below for each group in this longitudinal study.

1. *Social-Recreational Users (N = 9):* Three of these users reported episodes of social-recreational use from 1984 to 1988. When using cocaine, they averaged 0.58 grams per week (range, 0.25 to 1.00 grams). Although this represents a substantial decrease in dose from previous years, the average purity of their submitted samples was 86 percent, an increase of more than 10 percent from the samples analyzed in 1983. Hair samples from these three subjects, reflecting growth from the previous 6 to 13 months, were sectioned into monthly segments and analyzed. The results are given in Table 1 (subjects A, B, and C). It can be seen that all three subjects had periods of no use interrupted by periods of continuing use for one or more months. During periods of cocaine use, the quantitative RIAH levels for all social-recreational users were in the range of 5 to 20 nanograms (ng) per 10 mg of hair. These levels have been classified as "low," and they are associated with individuals reporting

infrequent social use of cocaine (W.A. Baumgardner, Psychomedics Corporation, personal communication, 1988).

Surprisingly, the remaining six subjects (subjects D though I) reported that they no longer used cocaine. The hair samples, reflecting use for up to the previous 11 months, confirmed distant but not recent use of cocaine for five of these subjects. Subject I showed regular exposure to cocaine for each of the previous 5 months, but urine tests given at the time of the examination revealed no current use.

2. *Circumstantial-Situational Users (N = 2)*: The two users in this category (subjects J and K in Table 1) reported that they rarely used cocaine anymore but now used methamphetamine intranasally on a daily basis for the same purposes. Urine and RIAH were negative for cocaine and positive for methamphetamine and its amphetamine metabolite in both subjects.
3. *Compulsive Users (N = 5)*: All five of these compulsive users had been smokers of cocaine free base at the 1983 examination. Since that time, two had been through treatment programs and reported that they no longer used cocaine, a report supported by negative findings in urine and RIAH (subjects L and M in Table 1). Subjects N and O reported compulsive smoking of cocaine free base at high levels, a report supported by RIAH findings of cocaine metabolite at levels in the range of 500 ng/10 mg to 1,000 ng/10 mg. RIAH levels above 101 are classified as "high," but only compulsive cocaine smokers appear to achieve levels consistently above 500 ng. Subject P reported continuing compulsive use but with intranasal cocaine and only occasional "parties" at which cocaine free base was smoked. The RIAH indicated regular exposure to cocaine for this subject in the range of 20 ng/10 mg to 100 ng/10 mg, levels classified as "medium" and

substantially lower than those associated with smoking cocaine free base.<sup>6</sup>

#### **Cocaine Free Base Users (N = 22)**

This Los Angeles area group consisted of individuals seeking clinical attention for cocaine abuse. All reported daily compulsive smoking of cocaine free base, with an average weekly intake of approximately 7 to 14 grams, and all satisfied the diagnostic criteria for a cocaine smoking disorder (Siegel, 1984c), cocaine abuse, and severe cocaine dependence (DSM-III-R<sup>7</sup>). The average RIAH level was 623 ng/10 mg (range, 4 to 2,560 ng/10 mg).

#### **Intravenous Cocaine Users (N = 8)**

This group consisted of recent arrestees in California and Colorado. They reported binge use of approximately 2 to 7 grams per week, and all satisfied the diagnostic criteria for cocaine abuse and severe cocaine dependence. The average RIAH level was 173 ng/10 mg (range, 18 to 1,560 ng/10 mg).

#### **Crack Users (N = 27)**

This Los Angeles area group consisted of individuals arrested for possession or sales of crack as well as street crack users recruited for interview studies. Most reported compulsive binge use with an average weekly intake of approximately 1 to 5 grams when supplies were available. All satisfied the diagnostic criteria for cocaine abuse. The severity of their cocaine dependence varied: 14 had symptoms that could be diagnosed as mild, 9 were classified as moderate, and 4 had symptoms of severe cocaine dependency. The average RIAH level seen in the mild and moderate users was 18 ng/10 mg (range, 3 to 122 ng/10 mg). The average RIAH level in the severe cases was 33 ng/10 mg (range, 3 to 147 ng/10 mg).

### Intranasal Cocaine Users (N = 51)

This group consisted of individuals being evaluated for court proceedings in California, Colorado, Florida, Illinois, Massachusetts, and New York. In general they reported varying patterns of use ranging from social-recreational to compulsive with weekly intakes of 1 to 21 grams. All satisfied the criteria for cocaine abuse and dependence (mild, N = 31; moderate, N = 14; and severe, N = 6). The average RIAH level was 12 ng/10 mg (range, 2 to 218 ng/10 mg). The higher values in this range tended to be associated with individuals who reported histories of compulsive intranasal use and were diagnosed with severe dependence. Several of these intranasal users showed RIAH exposure levels far greater than any found among crack users.

#### Treatment in the Fourth Cycle

During the early years of this cycle there were increasing numbers of users seeking treatment. In the absence of specialized programs, users turned to self-help approaches--the modern equivalent of the "home cures" popular during the second cycle (see Siegel, 1985b). More formal cocaine treatment programs eventually appeared and these incorporated behavioral, supportive, psychodynamic, and pharmacological approaches (Kleber and Gawin, 1984). Although registrations in cocaine treatment programs increased steadily from 1984 to 1988, they represented a small fraction of all cocaine users. Several studies (e.g., Erickson et al., 1987) found that the majority of cocaine users did not experience deleterious consequences, a finding undoubtedly related to the continued popularity of social-recreational patterns and the relatively low numbers of compulsive users. However, treatment programs may not have been widely available to inner-city crack users who, despite their low doses of cocaine, were engaged in high-risk patterns of use.

### DISCUSSION

The history of coca and cocaine has been a history of increasing doses, increasingly effective routes of administration, and increasing incidence of dependency and toxicity. It is clear that cocaine has a high potential for abuse and that the effects are neither predictable nor controllable.

It is also clear, however, that by avoiding high doses and risky routes of administration, individuals have engaged in long-term use of cocaine with low incidences of clinical problems. The best example of this is also the oldest: coca. The chewing and smoking of coca leaves marked the first cycle of cocaine use, and these practices continue today among native Andean peoples with little if any abuse. The amount of cocaine ingested from these leaves amounts to less than 500 mg per day, a behaviorally effective dose but one delivered slowly throughout the day.

A contemporary example of the relative safety of coca leaf preparations can be found in the coca tea episode of 1983 (Siegel et al., 1986). In order to divert Peru's enormous coca production into legal products, the Peruvian government's National Enterprise of Coca exported *mate de coca* or coca tea bags, to the United States. Millions of tea bags, labeled in English as either coca tea or decocainized coca tea, were sold and used throughout a three-year period ending in 1986. Analysis revealed that each tea bag contained approximately 5 mg of cocaine, the same dose found in a single, small cokespoon of street cocaine as used in the early 1970s (Siegel, 1977). Examination of representative coca tea drinkers using an average of 5 to 10 mg per day (range, 5-400 mg) confirmed the effects expected from the small amounts of cocaine: mild stimulation, mood elevation, and increased pulse rate. Most importantly, however, the coca tea drinkers did not satisfy the diagnostic criteria for cocaine abuse, and their claims of controlled use seemed to

be correct. Indeed, during this three-year period the National Addiction Foundation in San Francisco dispensed coca tea as part of their cocaine treatment program, and their patients reported that it was effective in curbing the craving for cocaine itself.

Coca tea was also one of the many coca products in use at the end of the first cycle of use in the nineteenth century. These products delivered relatively low doses through relatively slow-acting routes of administration. Few nonmedical uses or abuses were noted during the subsequent era of coca patent medicines. Starting in 1860, as cocaine replaced coca, products became as much as 200 times more concentrated, intranasal and injection routes delivered the drug faster and more effectively, and the second cycle of both medical and nonmedical abuses grew.

After legislative suppression of cocaine in the early 1900s, followed by a period of amphetamine use, abuse, and suppression, cocaine enjoyed a third cycle of use in the 1970s. The cycle began with social-recreational patterns of intranasal cocaine use. This pattern involved the use of 1 to 4 grams per person per month, consumed in several episodes. The cycle ended with these same users consuming 1 to 3 grams per week in far fewer episodes. In addition, many users escalated doses and dose regimens as they changed to patterns of circumstantial-situational, intensified, and compulsive use. The pattern of cocaine smoking also appeared at this time.

A fourth cycle of cocaine abuse was clearly visible by 1978. The cycle began with increased availability of cheaper cocaine and a changing pattern of binge use wherein users continued cocaine use until their supplies or their bodies were exhausted. Doses still averaged 1 to 3 grams per week, but they were consumed in only one or two binge episodes per week. The 1970s observations of users titrating self-administration of cocaine, thereby circumventing negative and adverse reactions, appeared less common in the 1980s. Starting in 1982, several new patterns began to emerge including increased cocaine

smoking and the use of topical routes of administration. The doses and routes associated with these patterns made controlled use difficult if not impossible and substantially increased the risks of dependency and toxicity.

In 1985 the introduction of crack changed the epidemiology of cocaine use in America by allowing individuals to purchase single doses of smokeable cocaine free base. These vending practices brought cocaine free base within the budgetary reach of almost anyone; however, studies of crack users in Los Angeles suggested that they used impure preparations and consumed less cocaine than either cocaine free base smokers or intravenous cocaine users, and only slightly more than intranasal users. Contrary to perceptions generated by the media, crack users studied here had a lower incidence of severe dependencies than intravenous users or cocaine free base smokers. Nonetheless, the association of crack with violent crime, together with pressures from the government's war on drugs, acted to negate cocaine's image as a safe recreational drug and to reinforce the view, previously held at the end of the second cycle of abuse, that cocaine was an especially dangerous drug and that users were menaces and fiends (Ashley, 1975).

The similarity of events in these repeating cycles prompts speculation about where current trends will lead in the future. One source of these trends has been Siegel's study of a small group of social-recreational cocaine users who have been tracked through the third and fourth cycles. The changing patterns of use seen in these Los Angeles users appear to reflect trends eventually manifested in other populations. For example, in 1974 these users first experimented with smoking cocaine, a pattern of use that took many years to surface in other parts of the United States.

By 1988 several of Siegel's subjects had stopped using cocaine, a report supported by a new RIAH analysis of cocaine exposures in hair samples. For most of a decade these individuals had been continuing social-recreational users who escalated their dosages and changed their dose regimens

while remaining resistant to total abstinence. Why did they stop? The users cited two factors: (1) the changing negative image of cocaine as a street drug and (2) the overall antidrug atmosphere promoted by the war on drugs. Nevertheless, although these factors may have influenced some of Siegel's subjects who were drawn from a population of generally well-educated and employed adults, they did not appear to affect the growing number of young, unemployed crack users appearing in the inner cities of America. The war against cocaine was unsuccessful in stopping cocaine use and only changed the patterns and behaviors of users (Wisotsky, 1983).

The second cycle of cocaine abuse had ended with similar changes in cocaine's image, similar antidrug campaigns, and the development of a widespread amphetamine problem. While nothing can be concluded from Siegel's two subjects who switched to methamphetamine, the growing number of methamphetamine labs and abusers surfacing throughout the western part of the United States (Methamphetamine labs, 1988; Methamphetamine on fast track, 1988) points to a potential methamphetamine epidemic that could attract many cocaine users. Indeed, small communities scattered throughout the United States already are experiencing a dramatic escalation in methamphetamine abuse (Isikoff, 1989). Taken together, these forces may bring about the end of the fourth cycle of cocaine abuse.

The demand for cocaine, however, a substance far more reinforcing and desirable than methamphetamine (or any other psychoactive drug), will persist among the millions of continuing users. If the domestic coca cultivation industry can develop to the levels achieved by marijuana cultivation, or if domestic synthetic cocaine laboratories can improve their production methods, then a fifth cycle of cocaine may follow. Whether such a future cycle is one of use or abuse will depend entirely on preparations, doses, and patterns of use.

The nature of these repeating cycles has important implications for treatment. The most significant

finding is that cocaine abuse, and the need for its treatment, is not a necessary concomitant of growth in the number of users. Cocaine use is clearly different from cocaine abuse in terms of the doses and frequencies that constitute the various patterns of self-administration. Although the absolute number of people using cocaine has continually escalated, when low-dose preparations and infrequent patterns of use are the rule, as during the first and third cycles, there has been little need for treatment. Increased dosages and frequent patterns of use, as seen during the second and fourth cycles, have resulted in abuse, and these trends have been paralleled by an increase in the number and diversity of treatment services.

Therefore, it is important to recognize that behavior in the current fourth cycle includes several patterns of use associated with low doses and low toxicity, albeit large numbers of users (e.g., coca tea drinkers and some social intranasal users). Consequently, it might be more efficient to focus medical treatment resources on specific types of users who are almost always abusers (e.g., cocaine smokers) rather than targeting all users per se. However, it is equally important to note that even within a particular group such as crack users, individuals may differ substantially in the severity of their dependence. Thus, treatment services must remain adaptive to the needs of clients and flexible in approaches.

In cases of cocaine intoxication and acute toxic reactions, treatment can be guided by clear diagnostic criteria including physical and behavioral indices. But diagnosis of cocaine abuse and dependence do not rest on such clear signs as intoxication or even route of administration. Rather, such determinations rely more heavily on an individual's self-reported history of cocaine use. Self-reported histories are not completely trustworthy: they may be lacking in important details, they may be self-serving, or people give confused histories because of intoxication. Therefore, treatment services might benefit by utilizing the RIAH toxicology test as an aid to diagnosis and to monitor treatment itself.

## NOTES

<sup>1</sup>Pratt (1943) records the purchase as cocaine. The original entry in the day books of Corneau & Diller records the purchase as "cocaine." This spelling was sometimes used for coca extract products, for a coca wine named "Cocaine," for a cocaine-based local anesthetic preparation, and for a coconut oil hair product named "Cocaine."

<sup>2</sup>This statement is based on unpublished raw data and archival information obtained from B. Hester, Khoka Productions, Inc., Jacksonville, Florida.

<sup>3</sup>Several earlier works, beginning with a 1787 dissertation (Julian, P.A. *Disertacion Sobre Hayo o Coca dans la Perla de la America*, Lima, 1787), are cited by Chevrier (1868) and referenced in the bibliography by Mortimer (1901).

<sup>4</sup>Based on information obtained from B. Hester, Khoka Productions, Inc., Jacksonville, Florida.

<sup>5</sup>The RIAH tests were performed by Ianus Foundation and Psychomedics Corporation.

<sup>6</sup>Compulsive cocaine smokers also showed significantly more cocaine trapped in the outside cuticle layer of hair (which absorbs ambient smoke) than did compulsive intranasal users.

<sup>7</sup>*Diagnostic and Statistical Manual of Mental Disorders*, 3rd ed., rev. Washington, D.C.: American Psychiatric Association, 1987.

## REFERENCES

Adams, E.H., J.C. Gfroerer, B.A. Rouse, and N.J. Kozel (1986) Trends in prevalence and consequences of cocaine use. *Advances in Alcohol and Substance Abuse* 6(2):49-71.

Allen, D., ed. (1987) *The Cocaine Crisis*. New York: Plenum Press.

Arif, A., ed. (1987) *Adverse Health Consequences of Cocaine Abuse*. Geneva: World Health Organization.

Ashley, R. (1975) *Cocaine. Its History, Uses and Effects*. New York: St. Martin's Press.

Baumgartner, W.A., C.T. Black, P.F. Jones, and W.H. Blahd (1982) Radioimmunoassay of cocaine in hair: concise communication. *Journal of Nuclear Medicine* 23(9):790-792.

Baumgartner, W.A., J.D. Baer, V.A. Hill, and W.H. Blahd (1989) Hair analysis for the detection of substance abuse in pretrial/probation/ parole populations. Paper presented at a Workshop on Hair Analysis for Drugs of Abuse, National Institute of Justice, Washington, D.C., January 8.

Baumgartner, W.A., V.A. Hill, and W.H. Blahd (1989) Hair analysis for drugs of abuse. *Journal of Forensic Sciences* 34(6):1433-1453.

Beard, G.S. (1871) *Stimulants and Narcotics: Medically, Philosophically, and Morally Considered*. New York: G.P. Putnam.

Bunting, C.A. (1888) *Hope for the Victims of Alcohol, Opium, Morphine, Cocaine, and Other Vices*. New York: Christian Home Building.

Chasin, D. (1972) *The Gourmet Cokebook*. White Mountain Press.

Chevrier (1868) *Notice sur les Propriétés et L'Usage du Coca du Pérou*. Roanne: Ferlay.

Coca wines of the market (1886) *The Druggists Circular and Chemical Gazette*, February, p. 32.

Cocaine labs on the rise (1984) *Drug Enforcement Report* 1(2):4.

- Courtwright, D.T. (1982) *Dark Paradise: Opiate Addiction in America Before 1940*. Cambridge, Mass.: Harvard University Press.
- Crothers, T.D. (1902) *Morphinism and Narcomaniac from Other Drugs. Their Etiology, Treatment, and Medicolegal Relations*. Philadelphia: W.B. Saunders.
- Darth, C. (1977) *The Whole Drug Manufacturers Catalog*. Manhattan Beach, Calif.: Prophet Press.
- Drug paraphernalia litigation (1984) *Drug Law Report* 1(9):105-108.
- Eddy, P., H. Sabogal, and S. Walden (1988) *Cocaine Wars*. New York: W.W. Norton.
- Erickson, P.G., E.M. Adlaf, G.F. Murray, and R.G. Smart (1987) *The Steel Drug. Cocaine in Perspective*. Lexington, Mass.: D.C. Heath.
- Erlenmeyer, A. (1889) *On the Treatment of the Morphine Habit*. Detroit, Mich.: Davis.
- Feral, R. (1984) *How to Rip Off a Drug Dealer*. Boulder, Colo.: Paladin Press.
- Gentile, D.P. (1979) *Cocaine: Legal and Technical Defenses*. Houston, Tex.: National College of Criminal Defense Lawyers and Public Defenders.
- Grinspoon, L., and J.B. Bakalar (1976) *Cocaine. A Drug and Its Social Evolution*. New York: Basic Books.
- Hammond, W.A. (1887) Coca: its preparations and their therapeutical qualities, with some remarks on the so-called "cocaine habit." *Transactions of the Medical Society of Virginia* Nov.:212-226.
- Hanna, J.M. (1970) The effects of coca chewing on exercise in the Quechua of Peru. *Human Biology* 42(1):1-11.
- Hisayasu, G.H., J.S. Goodman, J.L. Cohen, and R.K. Siegel (1982) Evaluation of cocaine free base extraction kits and procedures. In R.K. Siegel, *Cocaine Smoking. Journal of Psychoactive Drugs* 14(4):352-354.
- Holmstedt, B., J.-E. Lindren, L. Rivier, and T. Plowman (1979) Cocaine in blood of coca chewers. *Journal of Ethnopharmacology* 1(1):69-78.
- Honer, W.G., G. Gewirtz, and M. Turey (1987) Psychosis and violence in cocaine smokers. *Lancet* 2(8556):451.
- Hrdlicka, A. (1939) Trepanation among prehistoric people, especially in America. *Ciba Symposia* 1(6):170-177, 200.
- Isikoff, M. (1989) In rural America, crank, not crack is drug plague. *Los Angeles Times*, February 21, Part V, pp. 1, 4.
- Jeri, F.R. (1984) Coca-paste smoking in some Latin American countries: a severe and unabated form of addiction. *Bulletin on Narcotics* 36(2):15-31.
- Johnston, L.D., P.M. O'Malley, and J.G. Bachman (1987) *National Trends in Drug Use and Related Factors Among American High School Students and Young Adults, 1975-1986*. DHHS Pub. No. (ADM) 87-1535. Washington, D.C.: National Institute on Drug Abuse.
- Kissner, D.G., W.D. Lawrence, J.E. Selis, and A. Flint (1987) Crack lung: pulmonary disease caused by cocaine abuse. *American Review of Respiratory Disease* 136(5):1250-1252.

- Kleber, H.S., and F.H. Gawin (1984) Cocaine abuse: a review of current and experimental treatments. Pp. 111-129 in J. Grabowski, ed., *Cocaine: Pharmacology, Effects, and Treatment of Abuse*. NIDA Research Monograph 50. DHHS Pub. No. (ADM) 84-1326. Rockville, Md.: National Institute of Drug Abuse.
- Lee, D. (1981) *Cocaine Handbook. An Essential Reference*. Berkeley, Calif.: And/Or Press.
- Levine, S.R. (1987) Crack-associated stroke. *Neurology* 37(6):1092-1093.
- Lewin, L. (1924) *Phantastica*. Berlin: Verlag von Georg Stilke.
- Louis, J.C., and H. Yazijian (1980) *The Cola Wars*. New York: Everest House.
- Manschreck, T.C., J.A. Laughery, C.C. Weissstein, D. Allen, B. Humblestone, M. Neville, H. Podlewski, and N. Mitra (1988) Characteristics of freebase cocaine psychosis. *Yale Journal of Biology and Medicine* 61:115-122.
- Mantegazza, P. (1857) Ymportancia dietetica y medicinal de la Coca. *El Comercio Journal* Jan. 14.
- Mantegazza, P. (1975) *Sulle virtù Igieniche e Medicinali della Coca, a Sugli Alimenti Nervosa in Generale [On the Hygienic and Medicinal Virtues of Coca]*. Milan, 1859. Pp 38-42 in G. Andrews and D. Solomon, eds., (L. Forti and G. Alhadeff, trans.) *The Coca Leaf and Cocaine Papers*. New York: Harcourt Brace Jovanovich.
- Manuel (1977) *The Coca Cultivator's Handbook*. Ukiah, Calif.: L'leaf Press.
- Mariani, A. (1878) *La Coca du Pérou; Botanique, Historique, Therapeutique*. Paris: Mariani & Co..
- Mariani, A. (1888) *La Coca et ses Applications Therapeutiques*. Paris: Lecrosnier & Babe.
- Mariani, A. (1892) *Coca and its Therapeutic Application*. New York: J.N. Jaros.
- Martindale, W. (1886) *Coca, Cocaine and its Salts; Their History, Medical and Economic Uses, and Medicinal Preparations*. London: H.K. Lewis.
- Martindale, W. (1894) *Coca and Cocaine: Their History, Medical and Economic Uses, and Medicinal Preparations*. London: H.K. Lewis.
- Martindale, N. (1982) *The Extra Pharmacopoeia*. London: The Pharmaceutical Press.
- Merck, E. (1885) Cocaine and its salts. *Chicago Medical Journal and Examiner* 50:157-163.
- Methamphetamine labs in California: enforcement and legislation. (1988) *Substance Abuse Report* 19(19):1-3.
- Methamphetamine labs in California: enforcement and legislation (1988) Methamphetamine on fast track in the American West. *Street Pharmacologist* Summer, pp. 1-8.
- Meyers, A.C. (1902) *Eight Years in Cocaine Hell*. Chicago: Press of the St. Luke Society.
- Moodie, R.L. (1923) *Paleopathology*. Urbana, Ill.: University of Illinois.
- Mortimer, W.G. (1901) *Peru. The History of Coca. "The Divine Plant" of the Incas*. New York: J.H. Vail.
- Newcomb, M.D., and P.M. Bentler (1986) Cocaine use among young adults. *Advances in Alcohol and Substance Abuse* 6(2):73-96.

- Novak, M., C.A. Salemink, and I. Khan (1984) Biological activity of the alkaloids of *Erythroxylum coca* and *Erythroxylum novogranatense*. *Journal of Ethnopharmacology* 10(3):261-274.
- Paly, D., P. Jatlow, C. Van Dyke, F. Cabieses, and R. Buck (1980) Plasma levels of cocaine in native Peruvian coca chewers. Pp. 86-89 in F.R. Jeri, ed., *Cocaine 1980*. Lima: Pacific Press.
- Parke, Davis & Co. (1885) *Coca Erythroxylon and its Derivatives*. Detroit, Mich.: Parke, Davis & Co..
- Plowman, T., and L. Rivier (1983) Cocaine and cinnamoylcocaine content of *Erythroxylum* species. *Annals of Botany* 51:641-659.
- Pratt, H.E. (1943) *The Personal Finances of Abraham Lincoln*. Springfield, Ill.: The Abraham Lincoln Association.
- Resnick, R.B., and E. Schuyten-Resnick (1976) Clinical aspects of cocaine: assessment of cocaine abuse behavior in man. Pp. 219-228 in S.J. Mule, ed., *Cocaine: Chemical, Biological, Clinical, Social and Treatment Aspects*. Cleveland, Ohio: CRC Press.
- Rivier, L., ed. (1981) Coca and cocaine 1981. *Journal of Ethnopharmacology* 3(2&3).
- Roehrich, H., and M.S. Gold (1988) 800-Cocaine: origin, significance, and findings. *Yale Journal of Biology and Medicine* 61:149-155.
- Rusby, H.H. (1888) Coca at home and abroad. *Therapeutic Gazette* IV:158-165, 303-307.
- Sabbag, R. (1976) *Snowblind*. Indianapolis, Ind.: Bobbs-Merrill.
- Searle, W.S. (1881) *A New Form of Nervous Disease Together with an Essay on*
- Erythroxylon Coca*. New York: Fords, Howard, & Hulbert.
- Siegel, R.K. (1977) Cocaine: recreational use and intoxication. Pp. 119-136 in R.C. Petersen and R.C. Stillman, eds., *Cocaine: 1977*. NIDA Research Monograph 13. DHHS Pub. No. (ADM) 77-741. Rockville, Md.: National Institute on Drug Abuse.
- Siegel, R.K. (1980a) Cocaine substitutes. *New England Journal of Medicine* 302:817-818.
- Siegel, R.K. (1980b) Long-term effects of recreational cocaine use: a four year study. Pp. 11-16 in F.R. Jeri, ed., *Cocaine 1980*. Lima: Pacific Press.
- Siegel, R.K. (1982) Cocaine smoking. *Journal of Psychoactive Drugs* 14(4):277-359.
- Siegel, R.K. (1983) Cocaine: new issues for defense and prosecution. *Drug Law Report* 1(5):49-59.
- Siegel, R.K. (1984a) Changing patterns of cocaine use: longitudinal observations, consequences and treatment. Pp. 92-110 in J. Grabowski, ed., *Cocaine: Pharmacology, Effects, and Treatment of Abuse*. NIDA Research Monograph 50. DHHS Pub. No. (ADM) 84-1326. Rockville, Md.: National Institute on Drug Abuse.
- Siegel, R.K. (1984b) Cocaine and the privileged class: a review of historical and contemporary images. *Advances in Alcohol & Substance Abuse* 4(2):37-49.
- Siegel, R.K. (1984c) Cocaine smoking disorders: diagnosis and treatment. *Psychiatric Annals* 14(10):728-732b.

- Siegel, R.K. (1985a) New patterns of cocaine use: changing doses and routes. Pp. 204-220 in N.J. Kozel and E.H. Adams, eds., *Cocaine Use in America: Epidemiologic and Clinical Perspectives*. NIDA Research Monograph 61. DHHS Pub. No. (ADM) 85-1414. Rockville, Md.: National Institute on Drug Abuse.
- Siegel, R.K. (1985b) Treatment of cocaine abuse: historical and contemporary perspectives. *Journal of Psychoactive Drugs* 17(1):1-9.
- Siegel, R.K. (1985c) The war on drugs: the natural history of supply and demand and organized crime. Report prepared for the President's Commission on Organized Crime. Washington, D.C.
- Siegel, R.K., M.A. Elsohly, T. Plowman, P.M. Rury, and R.T. Jones (1986) Cocaine found in herbal tea. *Journal of the American Medical Association* 255(1):40.
- Smart, R.G. (1982) "Crack" cocaine use in Canada: a new epidemic? *American Journal of Epidemiology* 127(6):1315-1317.
- Smith, J. (1982) Challenges to drug paraphernalia laws. *Drug Law Report* 1:1-9.
- Smith, M.V. (1981) *Psychedelic Chemistry*. Mason, Mich.: Loompanics.
- Spotts, J.V., and F.C. Shontz (1976) *The Life Styles of Nine American Cocaine Users: Trips to the Land of Cockaigne*. NIDA Research Issues 16. DHHS Pub. No. (ADM) 76-392. Rockville, Md.: National Institute on Drug Abuse.
- Spotts, J.V., and F.C. Shontz (1980) *Cocaine Users*. New York: Free Press.
- Sramek, J.J., W.A. Baumgartner, J. Tallos, T.N. Ahrens, J.F. Meiser, and W.H. Blahd (1985) Hair analysis for detection of phencyclidine in newly admitted psychiatric patients. *American Journal of Psychiatry* 142:950-953.
- Starks, M. (1982) *Cocaine Fiends and Reefer Madness*. East Brunswick, N.J.: Cornwall Books.
- Thudichum, J.L.W. (1885) *The Coca of Peru and its Immediate Principles: Their Strengthening and Healing Powers*. London: Bailliere, Tindall and Cox.
- Tibbles, W. (1877) *Erythroxylon Coca: A Treatise on Brain Exhaustion as the Cause of Disease*. Helmsley, U.K.: W. Allenby.
- Washton, A.M., M.S. Gold, and A.C. Pottash (1986a) Crack. *Journal of the American Medical Association* 256(6):711.
- Washton, A.M., M.S. Gold, and A.C. Pottash (1986b) "Crack." Early report on a new drug epidemic. *Postgraduate Medicine* 80(5):52-54, 57-58.
- Wisotsky, S. (1983) Exposing the war on cocaine: the futility and destructiveness of prohibition. *Wisconsin Law Review* 6:1305-1426.
- Wynne, R.D., M. Blasinsky, P. Cook, L.A. Landry, and S. Murphy (1980) *Community and Legal Responses to Drug Paraphernalia*. National Institute on Drug Abuse Services Research Report. DHHS Pub. No. (ADM) 80-963. Rockville, Md.: National Institute on Drug Abuse.

**TABLE 1 Segmental RIAH Analysis by Months for Social-Recreational Users Indicating Positive (+) Results for Cocaine Metabolite (1 month = 1 cm of hair)**

Subject	Monthly Segment												
	1	2	3	4	5	6	7	8	9	10	11	12	13
A	+	+	+	-	-	+	+	+	+	-	-	+	+
B	+	+	+	-	-	+	-	-					
C	-	+	+	+	-	-							
D	-	-	-	-	-	-	-	-					
E	-	-	-	-	-	-							
F	-	-	-	-	-	-							
G	-	-	-	-	-	-	+	-	+	-			
H	-	-	-	-	-	-	-	-					
I	+	+	+	+	+								
J	-	-	-	-									
K	-	-	-	-	-	-							
L	-	-	-	-	-	-							
M	-	-	-	-	-	-	-	-					
N	+	+	+	+	+	+							
O	+	+	+	+	+	+	+	+					
P	+	+	+	+	+	+	+	+	+	+			

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During the Substance Abuse Coverage Study, many individuals shared ideas and information with the study committee. The most important contributions in this respect were of two sorts: participation in two symposia organized by the committee in Washington, D.C., on June 1, 1988, and in Irvine, California, on October 4, 1988, and hosting of site visits by committee members and staff in six states during the intervening months.

The symposia gave the committee an opportunity to hear from and question closely a selection of knowledgeable individuals involved with drug treatment programs in a variety of roles such as clinical services, research, administration, third-party funding, and referral. These events gave the committee opportunities to hear not only individual presentations but also the participants' counterpoints to each other's and to the committee's tentative points of view. These exchanges breathed life into the committee's images of the treatment system, and committee members are grateful to all of the symposium participants for taking part in these important formative events.

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Patricia Armocida, Blue Cross/Blue Shield Association,  
Chicago, Illinois  
John C. Ball, Addiction Research Center, Baltimore,  
Maryland  
Lee Grutchfield, Human Resource Development,  
Continental Airlines, Houston, Texas  
Norman Hoffmann, Chemical Addiction/Abuse  
Treatment Outcome Registry, The Ramsey Clinic,  
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Don Jones, Consulting and Continuing Education  
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Minnesota  
Jill Klobucar, Human Affairs International, Arlington,  
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*Steven Sharfstein, Sheppard and Enoch Pratt Hospital,  
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Bruce Vander Els, Milliman and Robertson, Radnor,  
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Participants in the Irvine symposium were:

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